SOUTHERN AUTOMOTIV JOURNAL

NOVEMBER, 1956

Shaping the Outgo to Income page 33

spect page 36

e the Plug page 61

University Microfilms
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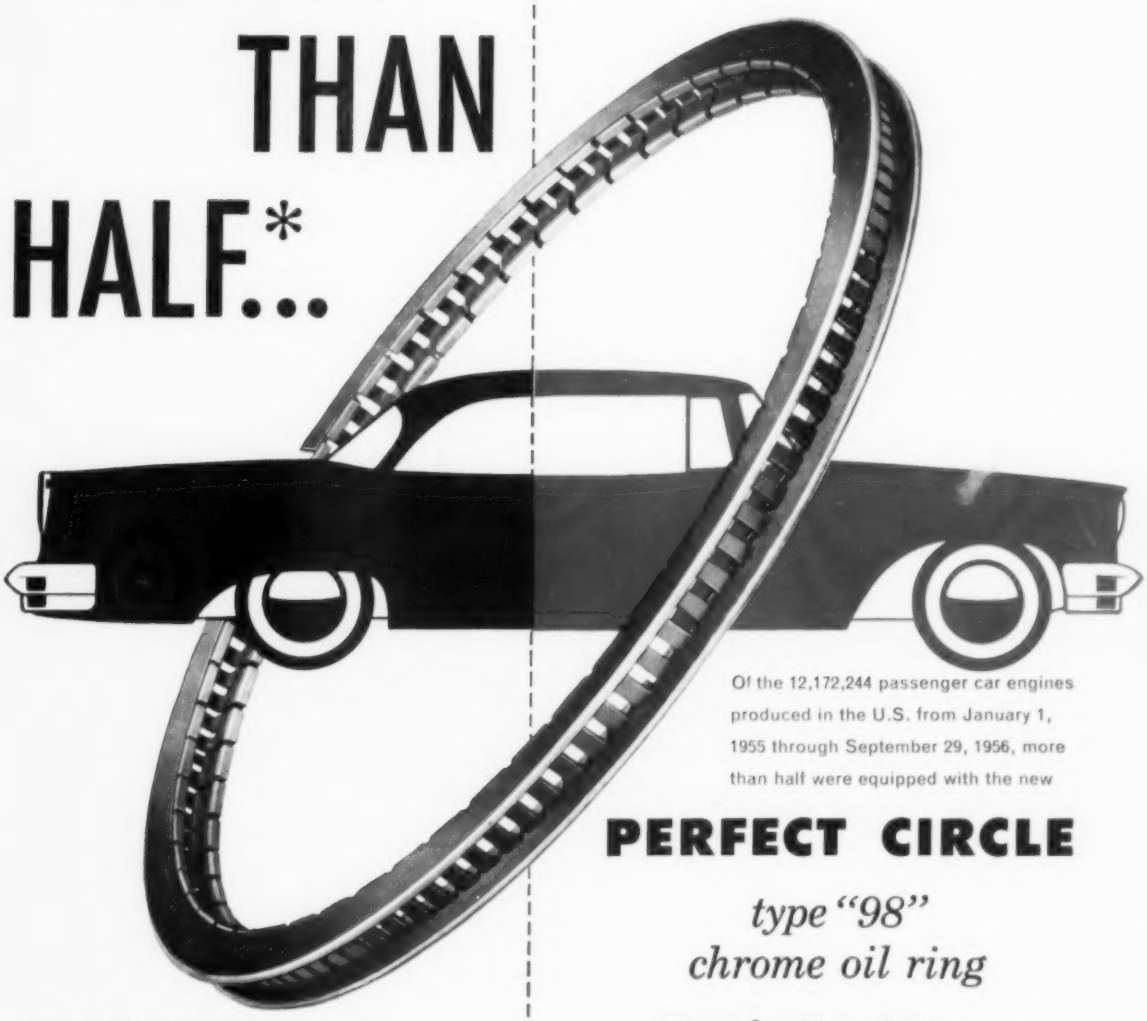
SERVING THE 19 SOUTHERN AND SOUTHWESTERN STATES

MORE THAN HALF.*..



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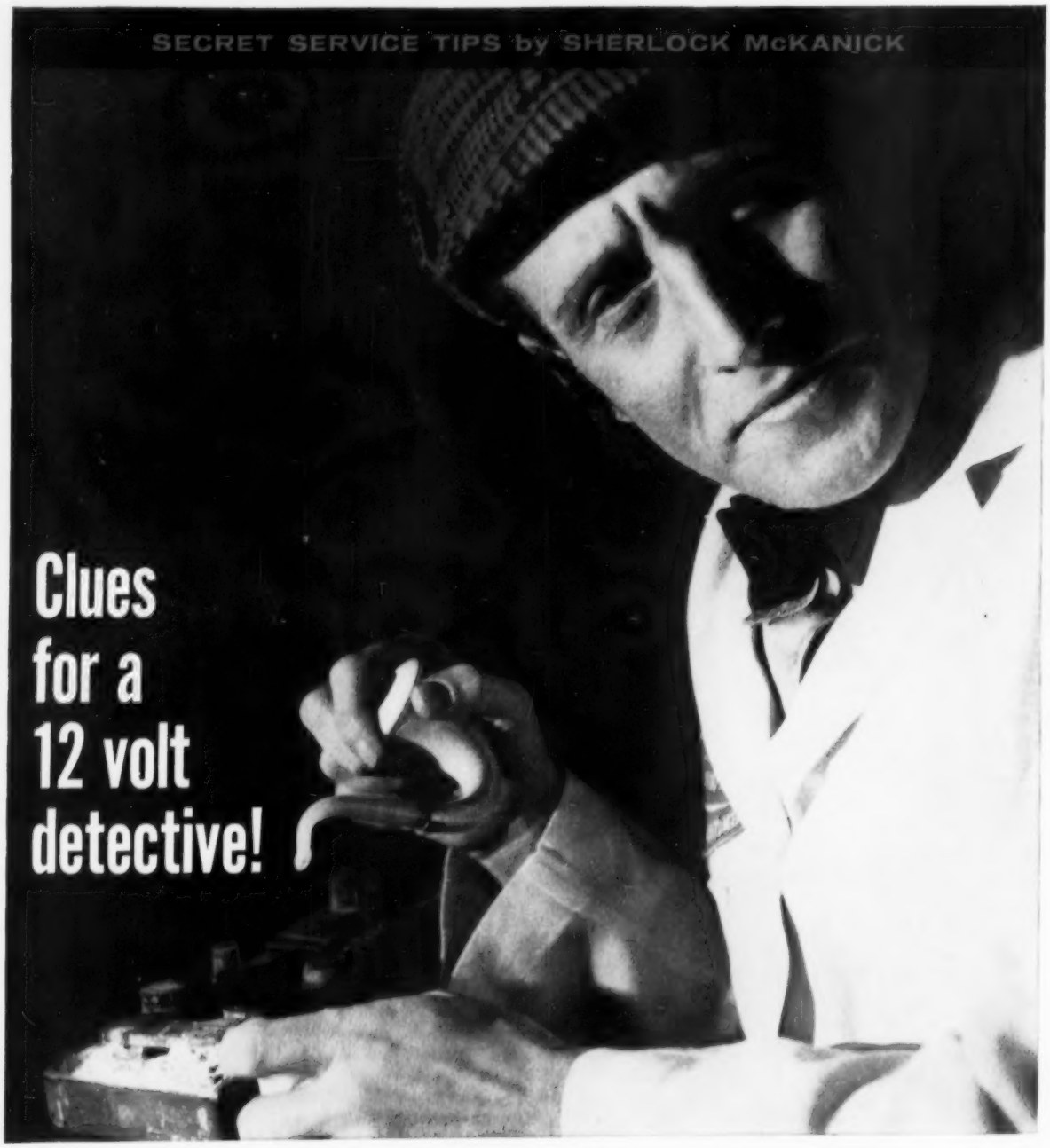
"Best for New Engines... Essential for Worn Engines"

*53.6% were Perfect Circle Type "98" chrome oil rings. 46.4% were all other oil ring types combined, including other Perfect Circle oil ring types.

SECRET SERVICE TIPS by SHERLOCK McKANICK



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"**Blue Streak Bulletin No. 83-55 has valuable tips** on how to prevent this damaging current discharge. For example: Clean battery with dilute ammonia or soda solution. Clean corrosion around posts and terminals. Use wire brush cleaner (Blue Streak Part No. 71).

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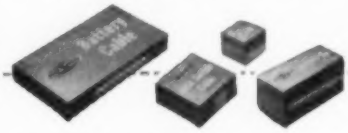

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Volume 36 Number 11

TRICKS OF THE TRADE *from* PERMATEX

To Secure Wires. Loose wires are apt to rattle, and when they're held in metal clips the vibration may cause shorts. A bead of Form-A-Gasket No. 1 at spots along the wire holds it securely and protects the insulation.

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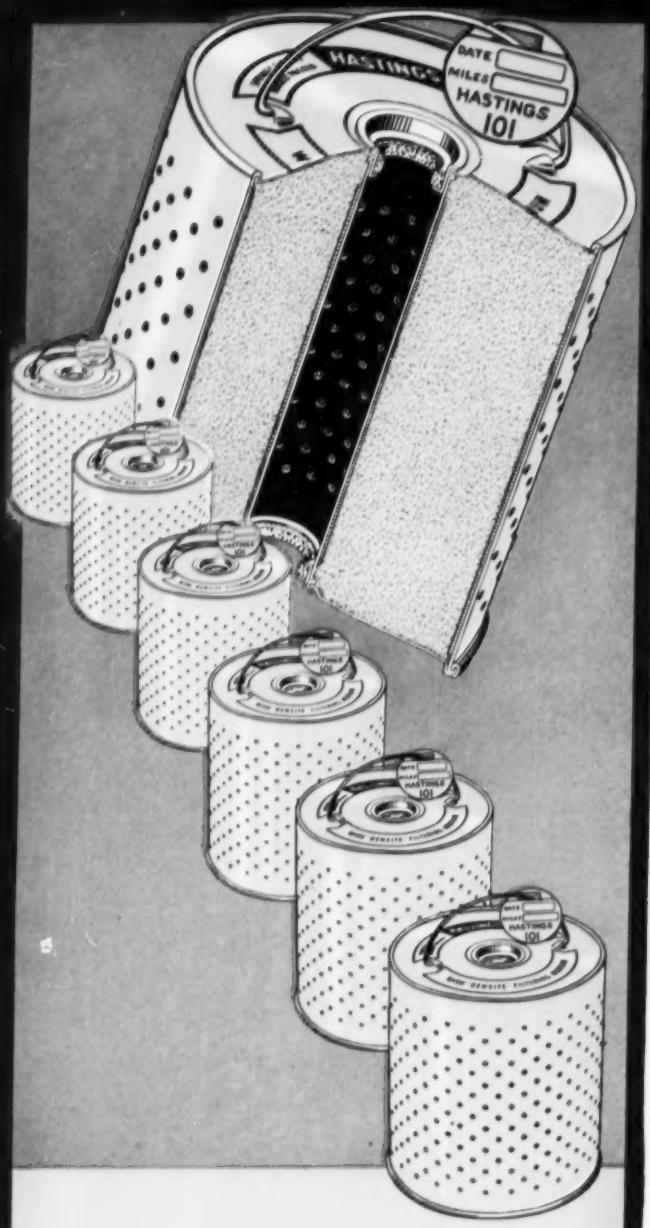

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SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

Vol. 36 NOVEMBER, 1956 No. 11

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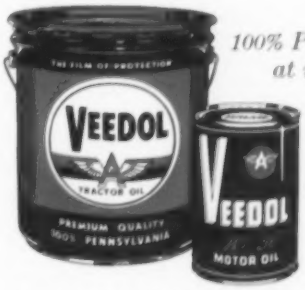

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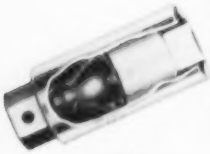

Patented Spark Plug Holding Sockets with 3/16" Opening. Cutaway view. Rubber insert holds plug securely, speeds work, prevents burning of fingers on hot manifolds. No. 5026HP—3/8" drive. No. 5326HP—1/2" drive.

Whitworth 3/16" to 3/8" Opening Sockets. For repair of foreign cars and motorcycles. Nos. 5206W-5212W—3/8" drive.

Double Hex Sockets. For elastic stop nuts. Nos. 4708T-4714T (1/4"-7/16" openings)—1/4" drive. Nos. 5210-5228 (5/16"-7/8" openings)—3/8" drive.

Revolutionary in design, the patented "Rotahead" socket handle takes the place of a ½" drive reversible ratchet and conventional hinge handle. Its strong free-wheeling mechanism permits a new bite every 12 degrees. The compact head gets into tight places. And the 16" length provides high leverage. Buy this sensational time saver at your PROTO dealer's. Send 10¢ for catalog of entire line to

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Automotive SPOTLIGHT

November, 1956

Chrysler Corp. is going to erect an assembly plant "somewhere in north central Texas," that native son of Texas and Chrysler's president, Lester Lum "Tex" Colbert, told the annual meeting of the Texas Mid-Continent Oil and Gas Association at Houston last month. "Long-range plans" call for this, he said, but he had no comment on the probable date of construction. At last reports, the corporation was holding on, as it has for years, to its option on a big piece of land on the southern side of Atlanta, just in case it might want to erect a facility there. Chrysler is the biggest single employer in Detroit, a matter of extreme concentration which many other areas have called to the corporation's attention.

The senate microscope is to turn next year on finance companies. So Senator Mike Monroney (D-Okla.) told the Oklahoma Automobile Dealers Association convention last month. "One thing I want to know is why, when one of your customers wants to pay off a 30- or 36-month contract, he is charged as much penalty, almost, as if he completed his contract," said the senator. The senate subcommittee on automotive marketing practices, of which he is chairman, intends to get that answer and some others, he asserted.

Why have franchised dealers' profits been hovering below the 1%-net mark for so long? Charlie G. Morris of Morris Service Station (Hudson), Tuscumbia, Ala., suggested these explanations in a panel talk before the annual convention of the Automobile Dealers Association of Alabama last month: "Our immature sales staffs, our unethical advertising, the lack of backbone in standing up to factory officials, the chiseler-type buyer and our lack of personal integrity."

If you want to know how best to cheat your customers, then don't pass up the revelations by a long-seasoned Texas dealer who points out on page 36 how the old flimflam game has been going on at some dealerships. But he doesn't recommend cheating--or any form of "low-balling"--if you want to stay in business long. He comes up with his own suggestions as to what must be done to restore prestige in place of the public apathy toward many dealerships.

Garagemen are getting organized despite what many garagemen had thought impossible. The Ohio state association's first annual convention was attended last month by 250 persons. Backed already by half a dozen live-wire city associations, the state body named an executive director to spearhead a campaign to bring even more operators into the fold. Florida, Georgia, Tennessee and other states are getting more interested, while Texas is "in the business" with its big state association. Maybe garagemen can be organized to promote their interests after all!

George Lemon Sugg, manager of the Mississippi Automobile Dealers Association since its birth, stepped aside this month to make way for Carl G. Wallace, Hazlehurst executive and attorney, who will devote his full time, something Sugg was not able to do because of a variety of other interests.

Rainless months are plaguing business in some areas of Oklahoma, Kansas and Texas. Reports from parts and equipment wholesalers spelled out last month the seriousness of the condition, as evidenced by crops down to as low as 25% of normal.

Unique Tribute to Engineering and Performance

We just thought you'd like to know!

Sealed Power Piston Rings

Sealed Power KromeX Piston Ring Sets

Sealed Power PX Pistons

Sealed Power Cylinder Sleeves

Sealed Power Valves

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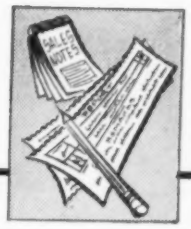
GET IT FROM YOUR JOBBER



Automotive MARKETS

Buick Sales Chief Lauds the South

"THE continued growth of the South is assured."

So declared Albert H. Belfie, general sales manager of GM's Buick Division, last month in Atlanta when asked by editors of SAJ to comment on the South and its relationship to Buick's market plans for '57.

"Industry is moving in, following population," he commented. "The continued growth of the South is assured. I assure you that when I am retired, I am moving south and you are going to make a rebel out of me too. Your prosperity is assured."

Top: Edward T. Ragsdale
Above: Albert H. Belfie

Buick, with steadily rising sales in the South and Southwest, is shooting for 10.5% of the new-car market next year, Edward T. Ragsdale, general manager of Buick and a vice-president of GM, said.

The first Southerner to head up Buick (a native of Hopkinsville, Ky.), Ragsdale asserted:

"We expect sales to increase by approximately 25% next year, which will give us in the neighborhood of 675,000 cars. This will be sufficient to keep Buick in the third-place position it now enjoys."

Production this year amounted to 551,000 cars.

At a meeting of southeastern dealers, he was applauded when he reported that while Buick ranks third in sales, it stands seventh in the number of dealers. A fourth of the dealers have been handling Buicks for at least 25 years, he also reported.

United Motors Chief Paints Bright '57

DURING 1957, United Motors Service distributors and their dealers will enjoy one of the biggest years in the history of the automotive replacement parts business, Roland S. Withers, United Motors general manager, told 78 United Motors zone, regional and operations managers in Detroit for their annual management conference last month.

"United Motors Service, celebrating its 40th anniversary during 1956, will have one of the largest years in United Motors' long history," Withers said, "and for next year, 1957, all present indications point to an 8% increase in United Motors business volume."

The 78 members of the UMS field staff, from zones across the country, spent three days in Detroit discussing 1957 merchandising and marketing plans with Withers and other top General Motors and United Motors executives.

"The 1957 business outlook for United Motors distributors and their dealers is brighter than it has ever been in the history of the automotive replacement parts business," Withers told the conference.

"Sixty-five million automobiles and trucks will be rolling on the roads of America during 1957."

Southern Fords "Exported" to Other States

THE SOUTH is quite an "exporter" to other states of the Fords made in southern assembly plants.

Ford's Board Chairman Ernest R. Breech, himself a Southerner, told an Alabama audience last month:

"Last year Ford Motor Co. manufactured 667,000 vehicles in southern plants. We exported to other states a lot of those vehicles. Almost 200,000 were sold in other regions of the country under our regular distribution pattern. That means that the production of those vehicles here, over and above the number sold in the southern market, represents a lot of additional jobs that have been created in the South by our company."

Breech, a former GM executive and the son of a Missouri blacksmith who once was offered a tryout with the St. Louis Browns, spoke at Muscle Shoals before more than 1,000 southern industrial, labor, agricultural and business leaders at ceremonies honoring Ford Motor Co. and Reynolds Metals Co. sponsored by the tri-cities of Florence, Sheffield and Tuscumbia. Both Ford and Reynolds have just begun construction of adjacent multi-million-dollar plants in that area. Ford's will be an aluminum castings plant that will use molten metal obtained from Reynolds for producing automotive parts.

The Ford executive predicted that 1957 may be another year in which the automotive industry would provide the dominant force in the nation's economy.

How many LOOKERS will you sign up?

New models build enthusiasm *and* opportunity. These are the days to get those extra sales that really count by using every advantage that Associates offers – especially *on-the-spot* financing and insurance. Be sure your salesmen are equipped with the facts about Associates' prompt one-stop financing and simplified paperwork. Get them enthused about the importance of a good financing plan and see how it helps them sign up a greater percentage of "lookers".

Those new models *will* move . . . especially with some real assistance from Associates. Call us and ask for complete details.

SAYS *Old Sage . . .*

THE PROSPEROUS PRO OF AUTOMOBILE ROW,

"You'll have a better batting average when you're prepared to close 'em on the spot."

ASSOCIATES INVESTMENT COMPANY
ASSOCIATES DISCOUNT CORPORATION
ASSOCIATES DISCOUNT (CANADA) LTD.
EMMCO INSURANCE COMPANY

Associates
SOUTH BEND, INDIANA

Automotive NEWS BRIEFS

Top: Manager Carl Wallace
Above: George Lemon Sugg

Carl G. Wallace Named Mississippi Manager

CARL G. Wallace is the new manager of the Mississippi Automobile Dealers Association, succeeding George Lemon Sugg of Jackson, who had been manager since the group's founding.

The new manager, who took office at the Biloxi convention early this month, was born in Lubbock, Texas, 41 years ago and moved to Mississippi three years later. He lived at Gulfport from 1925 until 1952, when he moved to Hazelhurst to become secretary-treasurer and general manager of Merchants Grocery Co.

A law graduate of Ole Miss, he began practicing law in 1940 and later served for 30 months in the Navy, being discharged as a lieutenant (jg). He was elected to the Mississippi house in 1954 for an unexpired term and was reelected last year to a four-year term which began last Jan. 1. He and his wife, the former Miss Jean Fairly of Hazlehurst, have three children.

While serving as headquarters manager of the dealer association, Sugg had also been manager of two other non-competing associations and engaged in advertising work. Some members had urged for some time a full-time manager, although paying extremely high tribute to Sugg's well-known ability.

Mercury Offers "Seat That Remembers"

A "SEAT that remembers" is a Mercury first, offered exclusively by Mercury for 1957.

In this "Seat-O-Matic," newly developed by Mercury, a control dial is mounted on the instrument panel which the driver turns until the seat moves up, down, forward or back automatically to the most comfortable position which he selects. This is his "setting." When the ignition key is turned off the seat automatically moves to its rear position to allow easier exit and entrance. When the ignition key is turned on again, the "seat that remembers" moves automatically to the last previously dialed position or "setting."

Special Products Appoints Norman K. VanDerzee

THE Special Products Division of Ford Motor Co. has appointed Norman K. VanDerzee executive assistant to J. C. "Larry" Doyle, general sales and marketing manager.

VanDerzee's automotive career covers almost 40 years, the majority of them with Hudson Motor Car Co. He joined Hudson in 1932 as a sales representative in Detroit, became sales manager in 1947 and vice-president of sales from 1949 to 1954. When Hudson and Nash merged to form American Motors, he stayed on for a little more than a year as vice-president in charge of sales.

Nov. 15—Annual meeting of Automobile Trade Association of Maryland, Sheraton-Belvedere Hotel, Baltimore.

Nov. 17-18 — Annual convention of Florida Automotive Wholesalers Association, Hotels San Juan and Angebilt, Orlando.

Nov. 25-26—Fall convention of Automotive Wholesalers' Association of Alabama, Hotel Whitley, Montgomery.

Dec. 8-16 — National Automobile Show, Coliseum, New York City.

Dec. 9—Annual convention of Georgia Automotive Wholesalers Association, Dinkler-Plaza Hotel, Atlanta.

Jan. 26-30—Annual convention of National Automobile Dealers Association, Civic Auditorium, San Francisco.

Feb. 4-7—30th anniversary National Auto Accessories Exposition, Coliseum, New York City.

Feb. 9-16—Albuquerque Auto Show, State Fair Grounds, Albuquerque, N. M.

April 4-7—Southwest Automotive Show, Fair Park, Dallas, Texas.

April 6-7—Annual convention of Independent Garagemen's Association of Texas, Baker Hotel, Dallas.

April 23-24—Convention of Motor and Equipment Wholesalers Association, McAllister Hotel, Miami, Fla.

April 25-27—International Automotive Exposition, Dinner Key Auditorium, Miami, Fla.

May 6-7 — Annual convention of Missouri Automobile Dealers Association, Chase Hotel, St. Louis.

May 9-12 — Midwest Automotive Service Industries Trade Show, St. Louis, Mo.

May 12-15 — Annual convention of Automotive Engine Rebuilders Association, Sheraton-Cadillac Hotel, Detroit.

May 21-22—Convention of National Standard Parts Association, The Somerset, Boston, Mass.

May 23-26 — National Automotive Service Show, Commonwealth Avenue Armory, Boston.

May 26-28—Annual convention of Tennessee Automotive Association, Peabody Hotel, Memphis.

June 20-23 — Annual convention of Independent Garage Owners of America, Toledo, Ohio.

FEDERAL-MOGUL SERVICE

Federal-Mogul Service
(Division of Federal-Mogul-Bower Bearings, Inc.)
DETROIT 13, MICHIGAN

 (Continued from page 9)

Politics or factory-dealer relations probably were being discussed as this picture was snapped at the Tennessee Automotive Association convention at Gatlinburg last month. Left to right are Forrest F. Cate, a Ford dealer of Chattanooga; Benson Ford, chairman of Ford Motor Co's dealer policy board, who addressed the gathering, and Mayor P. R. Olgiati of Chattanooga. Cate is a former president of the association.

Mechanics Get That Woman's Touch From Kansas City School's Prexy

AN ATTRACTIVE woman who doesn't own a car and doesn't know how to drive one is heading up the U. S. Trade Schools in Kansas City, Mo., where you can learn everything from repairing Hydra-Matics to air brakes.

How did this situation come about?

"Circumstances," said the rather dainty president, Illeane Littrell, at 32 the owner of the automotive trade school whose enrollment this fall is expected to rise to 500.

"I didn't plan it this way," said Miss Littrell. Her original goal in life was to be an artist and possibly an art teacher, but in 1949 a former owner of the school persuaded her to join his organization as advertising manager.

In the latter part of 1951 and early 1952, the first GI training programs were expiring and the school's status under the second GI bill was unsure. Only 35 students were eligible to continue in the veterans' training program and creditors were moving in on the school. The future looked doubtful.

Miss Littrell, who at that time had no voice in the management, began to wish she had. She reasoned that with all the floods of motor vehicles coming off the assembly lines, the demand for skilled workers would become greater than ever. She asked herself why the school couldn't make a successful transition from veteran training to a specialized educational institution for general students.

And that's just what it did!

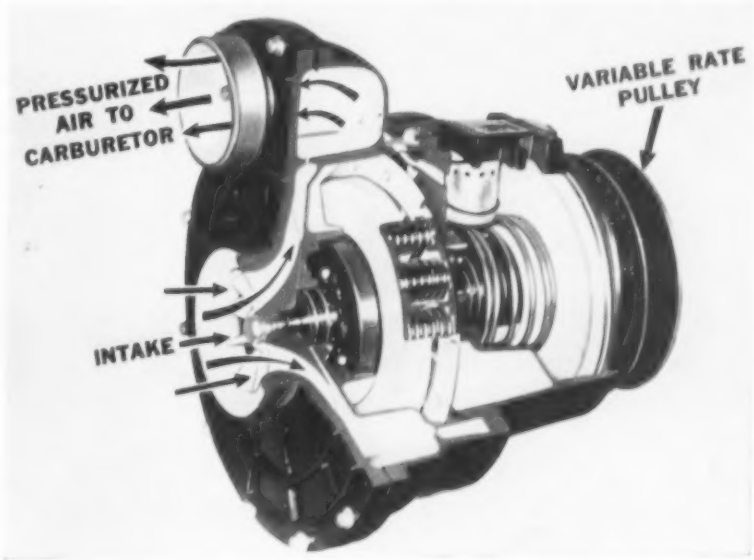
With the aid of a co-signer on her note, Miss Littrell took over the assets of the school, discharged the indebtedness and began putting money back into the school.

"Miss Littrell did it by hard work," a banker friend of hers commented, "and I mean seven days a week. She's determined. She's gifted, and she has a talent for management."

Recently a large manufacturer of diesel engines lent the school a $6,000 engine so that students could familiarize themselves with the model.

"Diesel is our toughest course, I believe," President Littrell said, "but more than 80% of the diesel students complete the course."

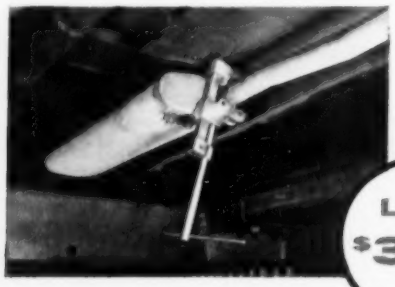
Studebaker will make an advanced design supercharger standard equipment on the 1957 Golden Hawk, an industry "first" in its price class. The supercharged Golden Hawk has up to 15% better performance than in 1956, according to Studebaker engineering tests. The sport-type car reportedly thus has the most horsepower per cubic inch of any American car. The supercharger, a five-pound boost, full-pressure system, crams about a 30% greater amount of fuel and air mixture into the combustion chamber, resulting in higher explosion pressures than under normal operating intake vacuum. The supercharger is driven through a variable rate pulley which produces maximum power during acceleration stage.



"It's NO PROBLEM to Replace MUFFLERS With This NEW HOLMES TOOL*"!

Holmes now offers a new tool that eliminates the difficulties usually encountered in the replacement of mufflers and tail pipes. The tail pipes of welded exhaust systems can be readily cut with only a quarter swing of this tool. Frozen joints of clamp type mufflers can be expanded and broken loose by use of serrated rollers which come with the kit. The Muffler Tool can be used to expand and loosen the joints, or as a cutting tool for replacement with a clamp-on-type muffler. Here's a truly valuable tool much needed by every mechanic, shop and service station. Furnished complete with interchangeable expander rollers and cutting wheels.

CUTTING PIPE — When assembled with cutting wheels, MUFFLER TOOL will quickly cut-through one-piece exhaust system with only a short swing of the handle.



SEPARATING JOINTS — By clamping expander rollers near muffler and operating TOOL, bond between joint is easily broken without damage to mating parts.

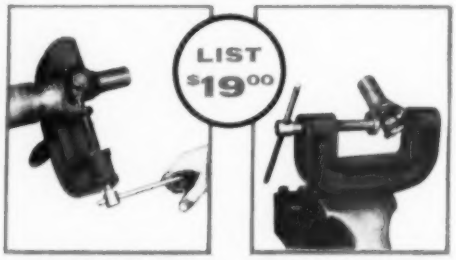
*Patent Pending

HOLMES SERVICER* For TESTING And RECLAIMING HYDRAULIC VALVE LIFTERS

Test full set of lifters in 10 to 15 minutes providing accurate leak-down test before re-use.

The Holmes Servicer* is a new precision machine that takes all of the guesswork out of servicing Hydraulic Valve Lifters. With this machine, all lifters, even those stuck inside the tappet body, can be easily taken apart, cleaned, re-assembled and tested. The leak-down test provided assures the use of *only* those lifters in perfect working condition. It prevents the scrapping of useful parts. Saves the customer money. Saves the shop time and trouble . . . and soon pays for itself, with increased profits and customer satisfaction.

HOLMES Universal Joint Tool*



FOR DISASSEMBLY FOR REASSEMBLY

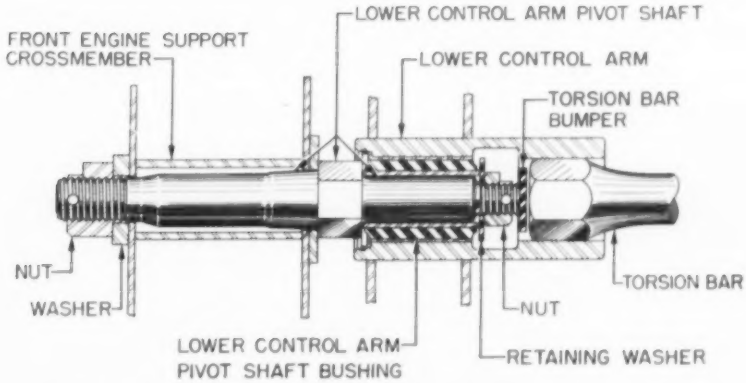
Here's a new tool that saves time and trouble when lubricating or repairing a Universal Joint. With this tool, a mechanic can quickly remove the retaining rings and easily force out the bearings . . . without damage to parts or the use of a metal drift and hammer to drive out the press-fit roller. The tool can be used to press out yoke either under the car, without removing propeller shaft, or in a shop vice as shown. Use of this tool saves from 30 to 45 minutes and is a valuable asset to any shop or service station.

Order from your jobber . . . *Or Write Factory Direct*

ERNEST HOLMES COMPANY

2505 EAST 43rd STREET CHATTANOOGA 7, TENNESSEE

 (Continued from page 11)



You'll be seeing this front suspension lower control arm pivot on some of the 1957 Chrysler Corp. products.

James J. Nance has been elected a vice-president of Ford Motor Company and appointed to the newly-established position of vice-president - marketing. Nance was also appointed a member of the administration committee and he will be chairman of the company's merchandising committee. He was formerly president of Hotpoint and Studebaker-Packard Corp.

•

Cadillac Is Satisfied with "Duals," General Sales Manager Roche Says

CADILLAC Division is quite satisfied with the present arrangement by which many of its dealers also handle an additional GM line, General Sales Manager James M. Roche told SOUTHERN AUTOMOTIVE JOURNAL in an interview Oct. 15 while in Atlanta for a showing of the '57 cars to dealers.

What's more, he said in answer to another question, the division does not contemplate any appreciable change in the present number of Cadillac dealers—a figure which he pointed out is not revealed.

All-time sales records in new and used cars, service and parts were predicted for the 1957 model year. The Cadillac sales chief based his optimistic appraisal on the record-breaking sales during the 1956 model year just ending, the over-all strength of the national economy and the continuing demand for fine cars.

"During the 1956 model year we built and sold 154,631 Cadillacs," Roche explained. "This surpasses by 10% our previous best model year performance of 1955." He forecast 1957 Cadillac model year sales at "somewhere between 155,000 and 160,000," pointing out that the fine-car market will determine just how many cars Cadillac will produce.

"In the 1956 model year Cadillac used-car sales were up 22% over 1955," Roche said. "Service and parts sales were up 15% and our dealers ended the model run with a substantial backlog of orders for 1957 cars."

He went on to say that thus far in 1956, Cadillac has 48% of the fine-car market, "a gain of 4% over the previous high percentage of market penetration attained by Cadillac in 1955. We are confident that our 1957 models with their outstanding engineering and styling advances will maintain this high degree of public acceptance.

"Besides our leadership in the fine car field," Roche pointed out, "Cadillac has moved from 10th place in industry-wide sales in 1955 to ninth place in 1956. Our sales thus far in 1956 total 2.4% of the industry, a new high for Cadillac."

General Sales Manager Roche

In appraising Cadillac's future outlook, Roche cited the fact that gross national income is at a record high and the business outlook generally is good.

"There are more than four million family units in the United States with incomes of $10,000 per year or more," Roche said, "and this number is growing. In other words, the Cadillac market is expanding."

To illustrate this market growth, Roche explained that there have been more owners of other make cars purchasing Cadillacs during the 1956 model year than in any previous year. These new buyers were largely the reason Cadillac's 1956 model year sales topped the 1955 model record by nearly 14,000 cars.

He viewed the long range outlook with optimism, too, pointing out that the U. S. population forecast for 1975 is 225 million persons compared with 165 million now.

Roche said that Cadillac would show for the first time the production version of its ultra luxury car, the Eldorado Brougham, at the New York Automobile Show in December.

THE MOST TROUBLE-FREE IGNITION CONDENSERS EVER DESIGNED
NEOPRENE INSULATION
BRASS TERMINAL
BUNA S END PIECE
PRESSURE SEALS
SOLDER
HIGH PRESSURE CONNECTION
ELECTRONIC WELD
NON-INDUCTIVE WINDING
HIGH PRESSURE CONNECTION
ALL THESE ECHLIN EXTRAS AT NO EXTRA COST TO YOU!
ADVERTISED IN The Saturday Evening POST
NAPA
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ECHLIN
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CONTACTS
COILS • CONDENSERS
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ELECTRICAL PARTS
ECHLIN MANUFACTURING COMPANY • NEW HAVEN 5, CONN. • U.S.A.
ECHLIN IGNITION OF CANADA LTD. • 56 CONNIE ST. • TORONTO 15, CANADA

Automotive NEWS BRIEFS

(Continued from page 13)

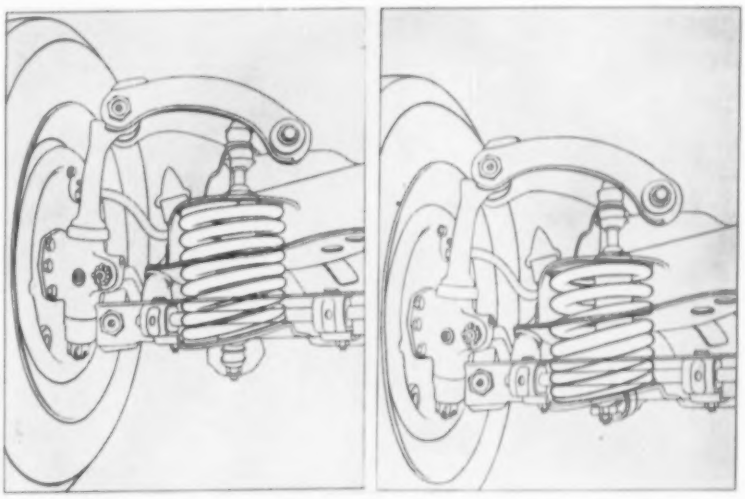
Somerville Cites Future For Selling Cars

"By 1965 we can be selling 8,000,000 cars a year," IF—

That was the observation by Robert C. "Bob" Somerville, assistant to the vice-president (Charles Jacobson) for dealer relations, Chrysler Corp., at the recent annual convention of the Arkansas Automobile Dealers Association.

"Public relations in the car business is at a low ebb right now," said the former Dodge general sales manager. "Because it affects the dealers and the manufacturers alike, both must work together to reverse that trend."

"Bob" Somerville



The new Studebaker variable rate front coil spring (right) is designed to produce a soft ride. Introduced on 1957 Studebaker sedans and sports-type cars, the spring automatically adjusts to varying loads throughout the spring ranges to insure a soft, comfortable ride, engineers said. The variable rate spring compresses at an unequal rate, coil by coil. This compares with conventional springs (left) which compress at an equal rate, leaving the same spacing between each coil under all load conditions. The new Studebaker spring coils, as they collapse, are eliminated from the springing action. This actually lessens the springing surface and causes the spring to become stiffer as the load increases. Since average car load is one or two people, the purpose and effect of the new spring is to give the same soft, yet firm, ride with one passenger that is usually found only under a heavy load of five or six passengers in cars equipped with conventional coil springs, engineers said.

Manufacturers and dealers can win a higher degree of public confidence if they work together in a "dynamic partnership," he asserted. Factories are responsible for designing a car meeting the market's needs and for producing it in sufficient numbers. They must also, he said, see that distribution is on "a realistic and effective basis."

Dealers, Somerville said, have the tasks of operating an efficient retail business and of servicing the cars they sell.

Both groups are charged with the mutual responsibility of forecasting the market's needs, he declared.

"If we can achieve such a partnership, there is a tremendous opportunity ahead for the automobile business. By 1965 we can be selling 8,000,000 cars a year," the executive asserted.

Somerville's popularity among the thousands of dealers who know him led Chrysler Corp. to move him over into the field of factory-dealer relations earlier this year.

(More News Briefs on page 21)

New officers for the Arkansas Automobile Dealers Association, named at the recent annual convention, are (l. to r.): John M. Critz of North Little Rock, treasurer; Carl Welch of Pine Bluff, first vice-president; George H. Benjamin of Little Rock, who was elevated from secretary to executive vice-president, and Fred Poe (Chrysler-Plymouth) of North Little Rock, president. Absent was George W. Sandridge of North Little Rock, a former dealer who was elected secretary of AADA. Regional vice-presidents are Clyde Randall of Fort Smith, Hendrix Lackey of Mountain View, Dolly Parker of Magnolia and Raymond Clinton of Hot Springs.

No Dirty Wash Water!

WEAVER AUTOMATIC OVERHEAD CAR WASHER

automatically sprays fresh water and detergent over every inch of vehicle

Let's face it! When you sponge on detergent solution from a bucket, the water quickly becomes dirty, gritty, and greasy. You can't get a car clean and streak-free with such wash water, and will probably scratch the finish "to boot."

Not so when you use a Weaver Car Washer! Only fresh water and detergent is ever used . . . all automatically applied . . . in super-efficient working sequence. On one flick of a lever the Washer's exclusive "Spray Arch" delivers a tempering stroke of fresh water, then sprays on fresh detergent and water, stops pre-determined time for sponging, proceeds with 4 clear-water rinses, and automatically shuts off. Machine may be stopped at any stage of cycle and operation later resumed from same point, to enable operator to combine car washing with other duties. All manual duties mesh perfectly with automatic operations. Washer is suspended from overhead. There are no floor obstructions to impede movement of operator . . . no levers to manipulate for each operation. Controlled water delivery eliminates need for cumbersome boots, and aprons. Small wonder that you can wash cars far cleaner . . . far faster!

A Washington service station washed 68 cars in one day with a Weaver Car Washer and sold 840 gallons of gas to those 68 customers. The Weaver Car Washer is easily installed, and economically priced. Get full facts from your Weaver Jobber today or write us for Bulletin SAJ-710.

WEAVER

WEAVER MANUFACTURING CO., SPRINGFIELD, ILL, U.S.A.

SERVICE SHOP EQUIPMENT

Complete Weaver line includes: Twin Post Lifts . . . Single Post Frame Type Lifts . . . Unit Lifts . . . Bumper Lift . . . Car Washers . . . Wheel Alignment Equipment . . . Headlight Testers . . . Brake Testers . . . Wheel Balancing Equipment . . . Jacks . . . Wheel Dollys . . . Air Compressors.

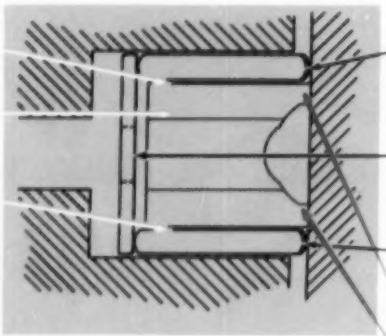
YOU DON'T
NEED X-RAY
EYES TO SEE...

WHY... CHROME CONTROL LEAK-PROOF RING

....at open-throttle high speeds and at high-vacuum low throttle speeds

POSITIVE LOW SPEED "HIGH VACUUM" OIL CONTROL

Low speed oil creep around the side of the ring is prevented by using an accurately machined separator which supports the cylinder contacting rails throughout their depth and circumference and prevents rocking. This provides uniformly close clearance between the groove wall and the rail without reducing the free action of the ring in the groove.

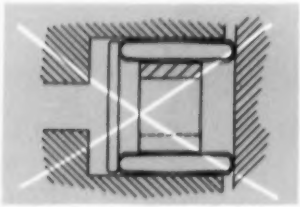


POSITIVE OIL CONTROL AT HIGH SPEEDS

High speed "flutter" or "surf boarding" is controlled by special flexible reverse loop expander which provides a more uniform high unit pressure on the two cylinder contacting rails. The rails are chrome armored but are prelapped and heat shaped for rapid break in.

WILL NOT GOUGE OR SCUFF CYLINDER WALL

The spacer will not gouge or scuff the cylinder wall because it is made of electric furnace iron. It is another oil ring in itself with built-in tension and two additional scraping edges. With the two chrome armored rails and the two oil scraping edges on the spacer, the 400 oil ring is really two rings in one.



ORDINARY STEEL SPACER

Ordinary Steel Spacer lacks broad support to prevent rocking in the groove. Sides of the spacer are not machined. Lack of machining prevents a uniformly close clearance between the groove wall and the rail, so oil passes around back of the ring.

ORDINARY STEEL RAILS

Ordinary steel rails are not cam shaped by heat treatment, therefore do not produce positive contact with the cylinder throughout its circumference.

HEAT SHAPED CYLINDER CONTACTING RAILS

Cam shaping by heat treatment produces the same "light tight" fit in cylinders that exist in piston rings that are individually cast to a cam shape. This cam shaping exclusive with McQuay-Norris is very important where the bearing edges are chrome armored. When these chrome surfaces are prelapped, it produces positive contact with the cylinder throughout its circumference and assures efficient trouble free ring and cylinder life.

CHROME CONTROL LEAK-PROOF PISTON RINGS

Will outperform any other piston ring set regardless of kind, design or price.

PRINTED IN U.S.A.

NGS HAVE *CRACKED* THE OIL MILEAGE BARRIER

Millions of installations have proved beyond a doubt that Chrome Control Leak-Proof Piston Ring sets will outperform any other piston ring set regardless of kind, design or price.

For quick seating, no waiting for break in, satisfied customers and more money in the till, start using them today. They're guaranteed.

McQUAY-NORRIS MANUFACTURING CO.

ST. LOUIS . . . TORONTO

LARGEST PRODUCER OF SMALL RINGS IN THE AUTOMOTIVE INDUSTRY.

AND YOU DON'T NEED X-RAY EYES TO SEE THE JOB McQUAY-NORRIS BEARINGS DO

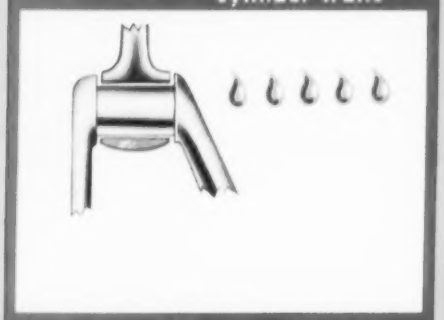
IT TAKES GOOD BEARINGS

IT TAKES REPLACEMENT BEARINGS

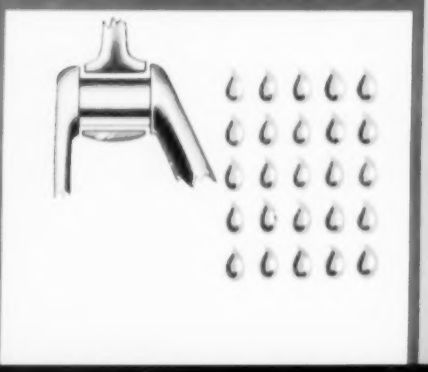
IT TAKES McQUAY-NORRIS BEARINGS

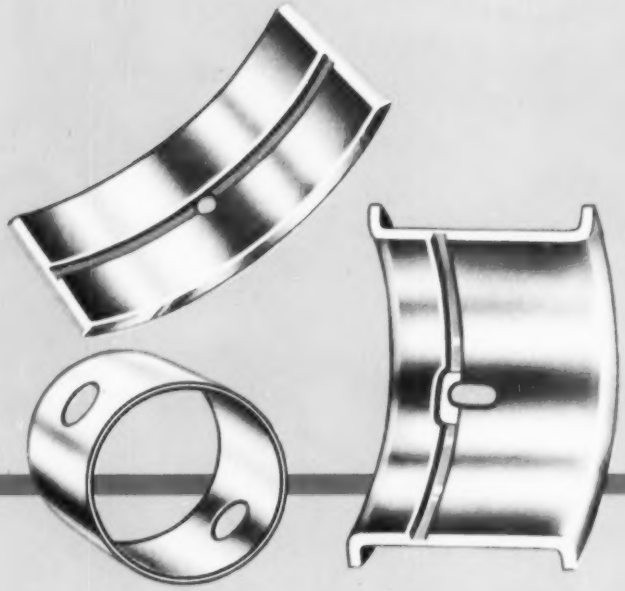
. . . . to do a good job

Twice the normal clearance = Five times amount of oil thrown onto cylinder walls



Four times the normal clearance = 25 times amount of oil thrown onto cylinder walls





McQUAY-NORRIS

COMPLETE BEARING SERVICE

 (Continued from page 15)

Officers elected by OADA included (l. to r.): Front row, J. G. "Jimmy" Knox of Lawton, retiring president; Paul Reed, Sr., of Sulphur, president; Charles B. "Chick" Coker of Oklahoma City, first vice-president; second row, Roy Tant, secretary-manager; W. G. "Buster" Horton of Oklahoma City, secretary-treasurer. Zone vice-presidents also elected were Jack Clark of Oklahoma City, Judson Bryan of Stillwater, Charles Wade of Lawton, Joe Bradley of Tulsa and W. L. McCulloh of Ardmore. Two U. S. senators addressed the annual convention.

Finance Companies to Be Studied, Monroney Tells Oklahoma Dealers

By Baron Creager
Southwestern Editor

FINANCE companies in the automobile field will be next to feel the glare of the investigation spotlight in Washington, according to a declaration by one of two U. S. senate champions of the franchised car dealers — Joseph C. O'Mahoney of Wyoming and Mike Monroney of Oklahoma — who addressed the 23rd annual convention of the Oklahoma Automobile Dealers Association in Oklahoma City Oct. 21-22.

Roy Tant, secretary-manager, said it was the first simultaneous appearance of the two senators before a dealer organization. Tant also expressed belief his association is one of few, if any, to gain membership over the past 12 months, showing an increase from 520 to 535.

O'Mahoney, author of the "good faith" bill, now law, asked, "If this law prohibits stopping bootlegging, why didn't they (the factories) stop it before the law was passed?"

He waved a copy of *Motor News Analysis*, published in Detroit, and ridiculed a passage therein which he read reporting that impact of the "good faith" law was slow to be felt in Detroit, with its mild language.

"That law," he continued, "is nothing more than a polite invitation to decency on the part of manufacturers. I will be back in the senate whether the manufacturers like it or not, because I have four years left to serve.

"It (the law) will stop bootlegging like the hearing in Washington got concessions from General Motors they hadn't thought of before. All the talk about this bill being a stimulation to bootlegging is all nonsense. I say to the manufacturers, please accept the mild language of this bill or that language may get worse."

O'Mahoney spent less than four hours in Oklahoma City, making a roundtrip flight from Wyoming for his 45-minute address.

It was Monroney who said the finance companies will be investigated by his committee "and one thing I want to know is why, when one of your customers wants to pay off a 30- or 36-month contract, he is charged as much penalty, almost, as if he completed his contract. He is chairman of the senate subcommittee on automobile marketing practices.

Otherwise, however, Monroney took a less belligerent view of the situation than O'Mahoney, Monroney reporting that he found evidence of the beginning of a trend back toward the partnership basis between dealer and factory, a condition of health for the "free competitive enterprise system," as he preferred to label the American system. But he did assert, facetiously:

"The new models are coming, with smaller wheels to match your smaller down payments, fuel injection instead of the factory needle and subdued colors to match the subdued attitude of factories.

"We need three R's in this business — responsibility, reliability and respectability. There is an absolute necessity that we bring back the traditional sales practices.

"I believe the ground work has been laid, at least by some factories, to begin to believe in partnership again. Replacement of threats with cooperation has been evidence of real effort. Dealers have made less money, but I find they are happier with less money under the new climate."

Monroney found great satisfaction, he said, in the fact there is less of the "brass ring," or the percentage-of-price-class battle between Chevrolet and Ford. And he gave dealers this solemn advice:

"Let's eliminate the pack. With new models and new sales advantages, this is the year to take that extra out of the delivered price."

Registration, dealers and wives, was 350, according to Tant.

The association chose Tulsa for its 1957 convention, but did not set dates.

(More News Briefs on page 164)

Here's Why BOWES Dealers are GETTING MORE than their share of Profitable Brake Fluid Business

ads like this *in* **TRUE Outdoor Life**

The Progressive Farmer

Farm Journal

POPULAR MECHANICS

are doing a BIG SELLING JOB for BOWES DEALERS.

You Can Cash-In on **BOWES** ADVERTISING
Ask Your **BOWES** Man
OR
Write Us Direct

BLOW-UP POSTER OF THIS AD WILL...

1 *Make your customers brake fluid conscious*
2 *Remind them to "check brake fluid, too"*
3 *Enable YOU to cash-in on Bowes Advertising*

BOWES "SEAL FAST" CORPORATION, INDIANAPOLIS 7, INDIANA • HAMILTON, ONTARIO • LONDON, ENGLAND
BOWES PACIFIC CORPORATION, RIVERSIDE, CALIFORNIA

SAVE 17% on Amazing FLARE BRAKE FLUID DEAL #100!

Flare

Get 2½ Gallons

SAE HEAVY DUTY (70R1)

BRAKE FLUID

Complete with Dispensing Pump

Regular Dealer Price $19.25

only $15.95*

With Coupon Below!

Retail Service Value $120.00
at "top off" price of 75¢ for 2 oz.

Now save 17% on 2½ gallons of famous Flare Heavy Duty Brake Fluid in re-usable can with flexible pour spout—plus a Special Dispensing Pump! This combination gives you $120.00 worth of easy retail sales for only $15.95! *A gross profit of 86% for you!*

Flare Heavy Duty is the brake fluid experienced service men use to insure top safety and performance. It mixes perfectly with *all* original fluids, helps prevent vapor lock, will not corrode metal, damage rubber parts, or form sludge or gum. Flare's heavy body assures good sealing (with no loss of hydraulic pressure), trouble-free performance, satisfied customers, more repeat business!

Start enjoying these important Flare advantages now while you save with Flare's amazing deal #100. Mail the coupon today!

NOTE: Flare is also available in 12-oz., pint, gallon, 5-gallon and 54-gallon sizes.
*Prices slightly higher in Canada

Fast, Clean, No-Waste Filling with a Flare Dispensing Pump

- One-man operation!
- Delivers 2 ounces per shot—automatically! Pumps out the *bottom* ounce too!
- Universal top fits all standard gallon cans and Flare 2½ gallon cans!
- 7 feet of hose reach every master cylinder!
- Keeps fluid clean, undiluted!

Flare

SAE Heavy Duty (70R1)

BRAKE FLUID

JOBBERS: Contact us for details

THE BELL CO., INC., 411 N. Wolcott Ave., Chicago 22, Ill.
In Canada: Bell Chemicals Ltd., 156 Bathurst St., Toronto, Ontario

SAVE 17%! MAIL TO YOUR JOBBER NOW!

Dear Mr. Jobber:

I want $120.00 worth of retail service value for only $15.95. Send me Flare Brake Fluid Deal #100.

Your Name _____

Your Address _____

City _____ Zone ____ State _____

IDENTIFY VIXEN FLEXIBLE BY THE WHITE ENVELOPE . . . VIXEN RIGID BY THE WHITE TANG

Try These Other Famous HELLER BRAND FILES:

HELLER® American Swiss SWISS PATTERN

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HELLER TOOL CO.

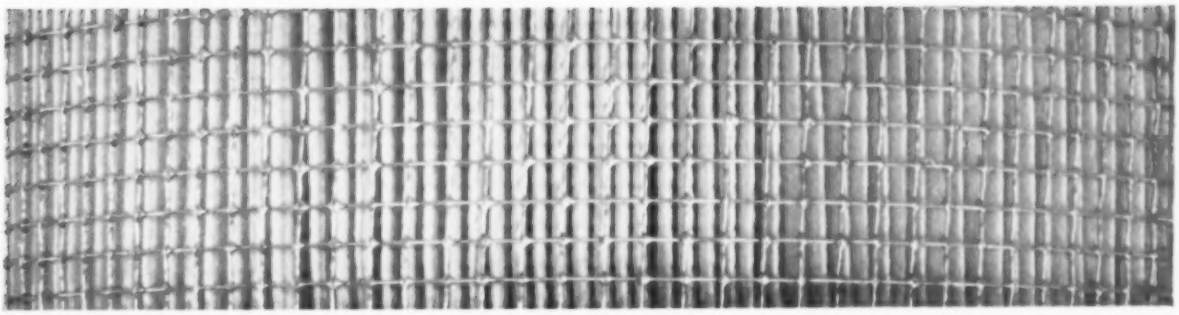
Subsidiary of Simonds Saw and Steel Co.

NEWCOMERSTOWN, OHIO

Branches: New York, Detroit, Chicago, Los Angeles

HELLER TOOL CO. SINCE 1836

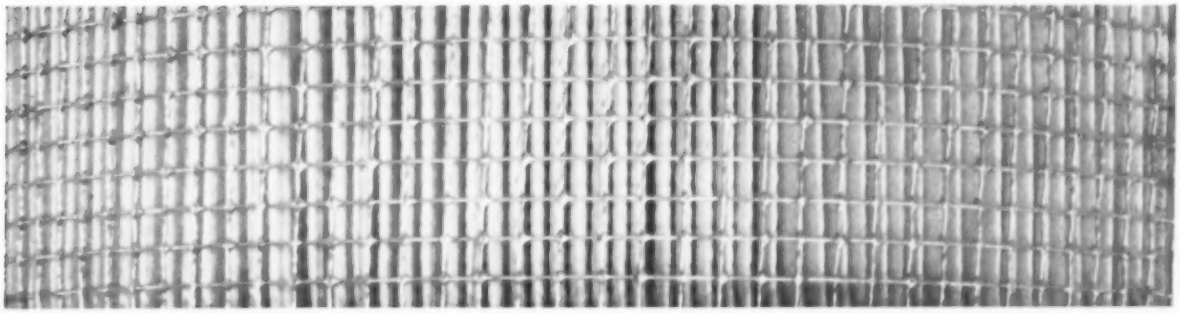
YOUR HELLER DISTRIBUTOR CAN SUPPLY *ALL* YOUR FILE NEEDS



What's in the Air for '57?

...a great new product for a great new market!

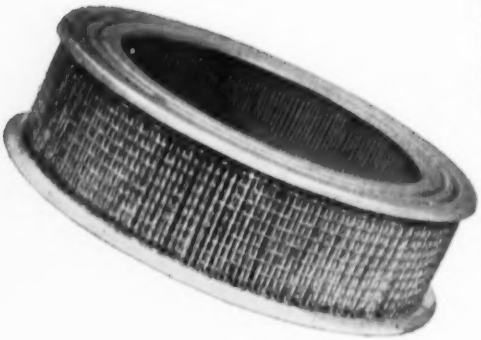
(See for yourself on the next page)



The amazing DRY AIR

It's here! The greatest advance in engine protection in 25 years! . . . It's the revolutionary dry-type carburetor air filter perfected by PurOlator!

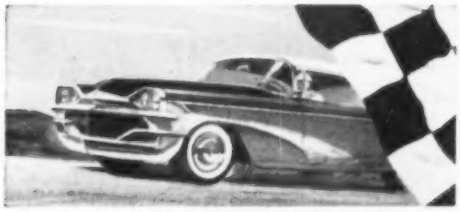
Grueling road tests show that the PurOlator Micronic Dry Air Filter will help keep engines like new twice as long—or more. It provides engine protection that means new-car performance for thousands of *extra* miles.



Race-proved...best for all cars

It's the BIG under-the-hood NEWS.

FILTER by PurOlator !



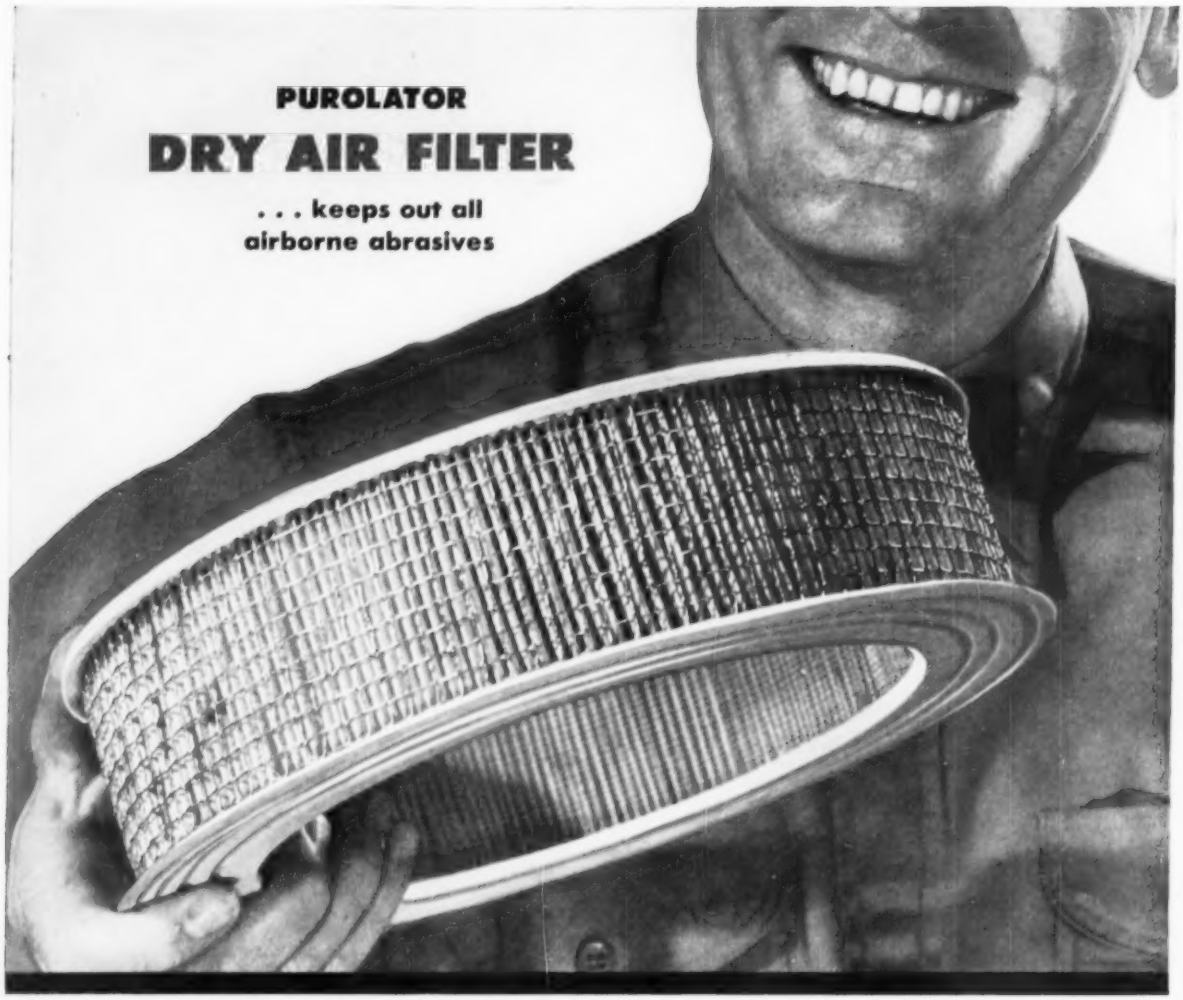
Proved in NASCAR stock car races and on big truck fleets

Tested on race tracks and highways under toughest possible dust conditions, the PurOlator dry filter has kept engines in new condition *twice* as long—or more.

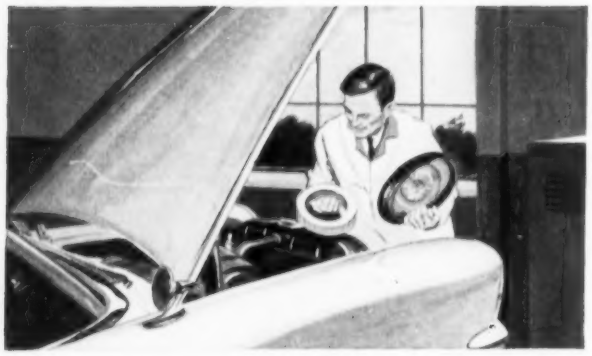
PUROLATOR

Now—the most important part for you!

(NEXT PAGE)



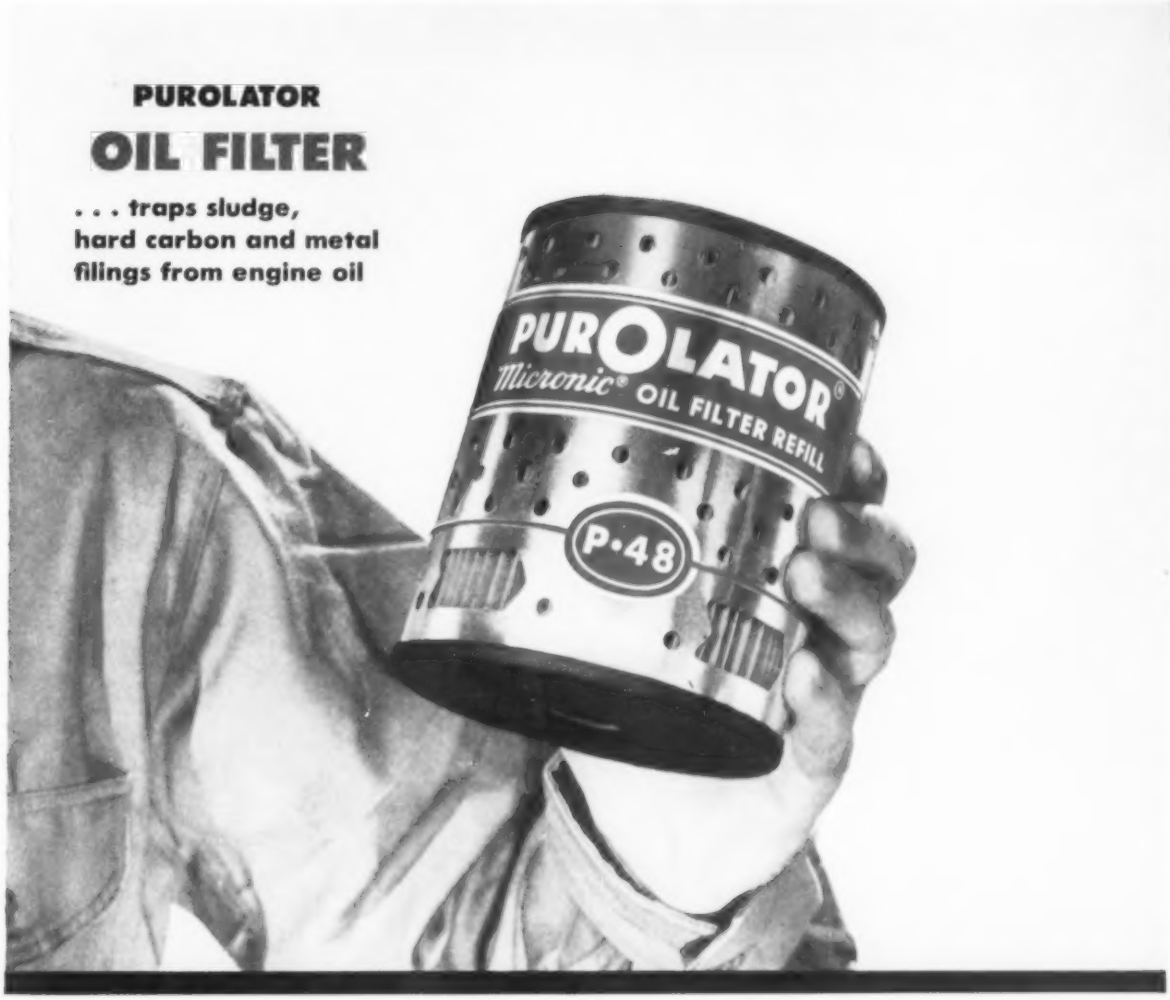
What a team



New PurOlator Dry-Type Air Filter easier to service!

No more messy air filter service with PurOlator. Just the twist of a screw and it's in your hands—no gaskets, dry, easy to remove, simple to replace.

WHAT'S IN THE AIR FOR '57? . . . PROFITS FROM



to clean up with!...

Here's a real profit partnership: You and the full, money-making PurOlator line—bigger than ever as '57 cars begin to roll.

Yes, 10 makes of cars for '57 will include the dry-type air filter—and this PurOlator-perfected filter is destined to give you more sales—more profits.

Powerful PurOlator promotions will convince your customers of the superiority of the PurOlator Air Filter . . . proved in NASCAR competition and long-haul fleet operation.

Watch for further information on this great addition to the PurOlator line of fine filters.

PUROLATOR PRODUCTS, INC. "Purolator" and "Micronic," Reg. U. S. Pat. Off.

Rahway, New Jersey, and Toronto, Ontario, Canada

FROM INGOT TO FINISHED PISTON . . .

All under 1 roof

TRIPLEX PISTONS

Complete manufacturing facilities mean . . .

- ***UNIFORM HIGH QUALITY CONTROL!***
- ***BETTER DELIVERY SERVICE!***
- ***COMPETITIVE PRICES!***

WHAT a power-packed sales story! TRIPLEX customers enjoy all the advantages of a completely *self-contained* source —including our own Smelter, Foundry, and Machine Shop! This single, massive production line makes possible *direct control* throughout every manufacturing operation . . . resulting in unsurpassed quality and service. Yet TRIPLEX Pistons are *competitively priced*, to build volume sales and steady repeat profits for you!

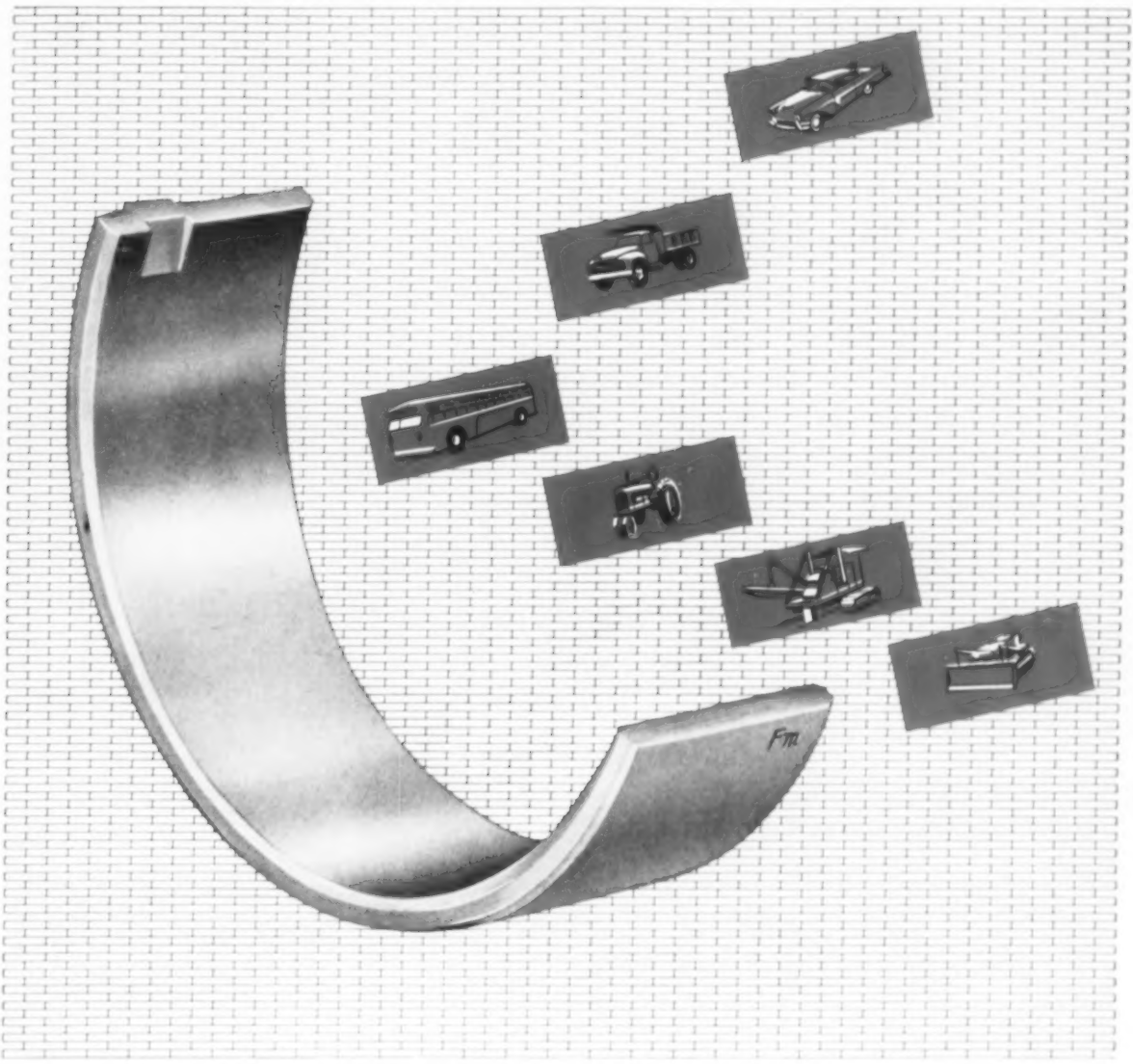
Triplex OFFERS ALL THESE SALES FEATURES:

- Classified Skirt Diameters
- Color-Classified Pin Holes
- Tin-Plated at No Extra Cost
- Precision Weight-Balanced Sets
- Passenger Car & Truck Pistons
- Warehouse Distribution

Order from your Jobber

TRIPLEX CORPORATION OF AMERICA

PUEBLO, COLORADO



Where performance counts most

GIVE THEM Fm QUALITY!

The only reason you rebuild an engine is to restore its original smooth-running power. That's why you should back up your own good work with the best parts. Replace the engine bearings. Worn bearings left in a rebuild are trouble-makers for the owner, and for you! Replace with Federal-Mogul bearings to protect your own quality work and to give customers the brand they know and prefer for finer performance. Your jobber has complete stocks—and fast service!

FEDERAL-MOGUL SERVICE

Division of Federal-Mogul-Bower Bearings, Inc.

RESEARCH • DESIGN • METALLURGY • PRECISION MANUFACTURING • SERVICE

"MISTER, YOUR BRAKES DON'T WORK!"

Don't let this happen to one of your customers. Best way to make sure: *pull* a wheel—*look* at the brake system—*show* the customer what's needed. And when you reline, use Grey-Rock Balanced Braksets, the linings with the difference you can *see*, *show* and *sell*.

SEE the difference. Distinctive Grey-Rock brake linings look different—are different. You can see it in the many different types of linings Grey-Rock combines in sets engineered to give balanced brake action and longer lining life.

SHOW the difference . . . in distinctive Grey-Rock woven and molded combinations. Where used, they provide far better brake action than molded linings alone. In other Grey-Rock sets, all-molded types give the best results.

SELL the difference. When you can see and show the difference, you can sell the difference. Explain how different shoes, even in the same brake, do different work, and why different types of lining are necessary for balanced brake action and long wear.

ASK YOUR JOBBER FOR GREY-ROCK FACTORY-BONDED SHOE EXCHANGE FOR HIGHER RELINE QUALITY, LESS LABOR PER JOB, GREATER PROFITS

Only **Grey-Rock** *makes*

BALANCED BRAKSET LININGS

GREY-ROCK DIVISION of Raybestos-Manhattan, Inc., MANHEIM, PA.

Consistently advertised in the

POST and **Farm Journal**

GET IT FROM YOUR JOBBER

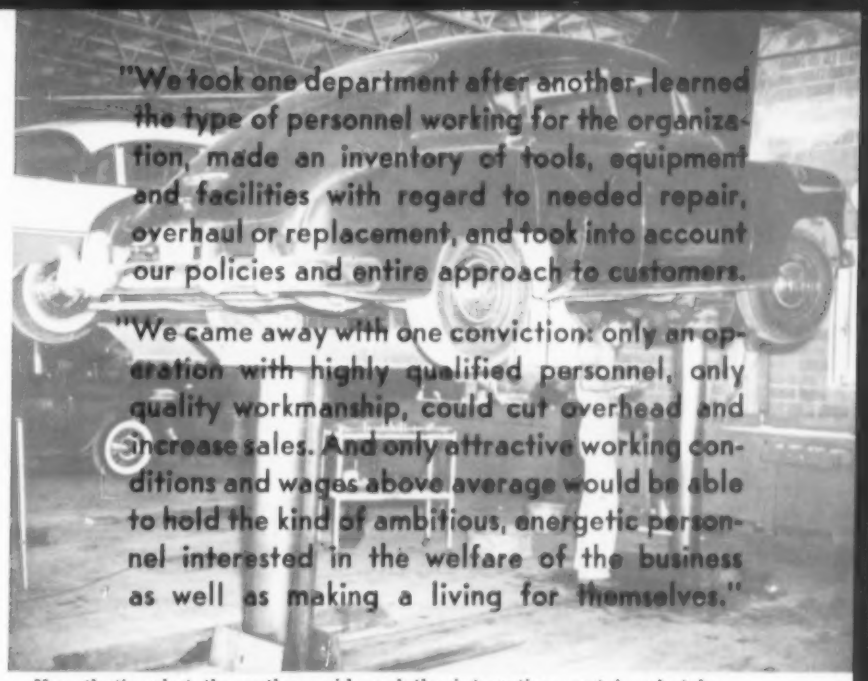
RM

RAYBESTOS-MANHATTAN, INC., Brake Linings • Brake Blocks • Clutch Facings • Industrial Rubber, Engineered Plastic, and Sintered Metal Products • Rubber Covered Equipment • Asbestos Textiles • Laundry Pads and Covers • Packings • Abrasive and Diamond Wheels • Bowling Balls

SOUTHERN AUTOMOTIVE JOURNAL

NOVEMBER, 1956

Shaping the Outgo to Income



Yes, that's what the author said, and the interesting part is what he did to execute the above analysis. He explains to you detail by detail.

By M. CLAUDE JENKINS
General Manager
Grady Motors Corp.
(Lincoln-Mercury)
Bethesda, Md.

WHAT to do to meet reduced income is a matter which has worried managements in many fields and it's always good to know some answers. We learned some of those answers by working them out for ourselves this year.

At the beginning of 1956, and even prior to it, we recognized certain warning signals that a lean year might be ahead for us. We knew from past experience that a certain amount of enthusiasm, excitement and a flurry of sales volume could always be expected with the announcement of new models. This year the accompanying excitement was wholly absent.

We searched for an explanation: our announcement of new models came out earlier than other models and business would likely pick up when other models appeared. We had a large new-car inventory and volume was not what we had expected. Business, as a matter of fact, was 30% off. But a spring market was still ahead and sales would surely be forthcoming, we told ourselves. March and April rolled around and there was no spring market. Sales had dropped behind 50%. To us it signified a real warning.

We initiated plans immediately to get our expense under control. We looked for no further change in the situation, since it resulted from last year's overproduction, too much long-term paper standing at too high a balance, the usual caution and indecision of an election year, the presence of little change in our models. Knowledge had, of course, leaked out that the 57's would be all new and not just a face lifting. We expected many people to wait.

Remembering what lifelong experience had taught us—that there were no miracles, no gimmicks, no fast shortcuts to a sound and healthy business—we took off our coats and rolled up our sleeves. There was no use feeling sorry for ourselves. There was no use trying to think up fancy, quick, money-making blitz schemes to bring about a reversal of events. The market was not there. There was nothing to do but take a personal inventory and get out into the firing line and make every effort count. We had to watch expenses and do the best we could with what we had.

We took one department after another, learned the type of personnel working for the organization, made an inventory of tools, equipment and facilities with regard to needed repair, overhaul or replacement, and took into account our policies and entire approach to customers.

We came away with one conviction: only an operation with highly qualified personnel, only quality workmanship, could cut overhead and increase sales. And only attractive working conditions with wages above average would be able to hold the kind of ambitious, energetic personnel interested in the welfare of the business as well as making a living for themselves.

What would keep this business—or any dealership—going was repeat business and expense control—repeat business from customers who recognized and appreciated quality service, highly trained personnel and modern, clean and efficient facilities. These would make a customer glad he came in here.

As we approached our shop with these objectives in mind, we improvised a test for each mechanic. Efficiency, attitude, dependability, honesty and sobriety would be the guidelines in evaluating each man's production. We also made a study of our shop's non-productive personnel.

We eliminated one mechanic who fell below our rating of average and saved $5,200 a year. We let go a shop clerk whose job it was to record and route all shop work as to type, approximate time for repair job and to distribute work evenly among stalls. Placing these

General Manager M. Claude Jenkins (left) delivers another one! Earlier in the year, when sales dropped off sharply, he analyzed showroom and shop, eliminating some unnecessary drains on the firm's lower receipts.

duties on the service manager and service salesman, we saved an annual $4,500.

Good mechanics are those who take pride in their work. Our men are very much interested in reports we give them at different times throughout the year showing weekly hours against production hours. For example, if a man works 50 hours and gets 48 hours on his R. O. tickets, we feel he has done a good job. When he falls below 44 hours, we generally find he is visiting at the stockroom too long or goofing off somewhere else. He could, however, run into tight situations pertaining to a job and fail to make the necessary comments on the shop copy. Extra credit would not be written into the record where a fixed manual labor rate would not reveal his extra labor.

Front-end and motor tune-up mechanics, of course, show higher labor returns than the mechanic who works on water leaks and rattles. It is our belief and the belief of our mechanics that a fixed weekly salary suits them better. For them it adds security; for us it does not sacrifice quality for quantity. Fewer comebacks follow.

If a man is below standard, we show him his production reports and try to make a better man of him. If he has the right attitude, we have something to work with. Most of the men like their jobs and willingly put the extra effort into a better job.

From personnel we went over every inch of the shop examining lighting, sockets, tools, equipment, benches, replacing, repairing, putting our house in order. We added, among other things, a second power wrench, replaced two jacks and overhauled one.

If our goal was to be quality workmanship, we wanted to provide the surroundings and means that would help a mechanic do a more efficient job in less time, saving him energy, time and labor. We wanted to raise our productivity per mechanic to maximum. Toward this end we hired a porter who cleans the stalls, scrapes up grease and keeps workbenches in order for a better impression on our customers and as a morale builder for our mechanics. We also painted the shop.

Sometimes it is advisable to spend and not stint when business is bad, and cleaning up the shop not only won us the 1955 Customer Service Award in competition with 89 dealers over five states but raised our productivity level per mechanic by six hours per week. In other words, out of a 50-hour week, an operation may expect 42 productive hours on an average. With changes in our setup, we began getting as much as six extra hours a week per man, and computing this for 11 mechanics, we found we had gained $297 a week.

Service Managed Doubled In

During our retrenchment program we extended the duties of our service manager. Until about 9:30 a.m. we have our service manager, service salesman and one of our stock countermen handling incoming cars. After 9:30 he resumes shop duties, going over mechanical problems with the men where help is needed. The parts man returns to the stockroom after the morning rush is over.

We made no personnel changes in our office staff or office manager, bookkeeper and title clerk and switchboard operator. However, we tried to make them more cost-conscious and more credit-conscious, and initiated a tighter program of watching new charge accounts and delinquent accounts, and watching accounts payable to get our maximum discounts. We also put upon them the responsibility of preparing weekly reports on number of production hours per mechanic in the shop, polish, lube, front-end, wash and body shop, reports on whom we buy merchandise from, terms of the different houses, foreign bills creeping into overhead, etc.

We gained not only a closer and more accurate picture of what was happening within the operation with regard to income and outgo from their analyses and studies, but these employees have caught on as to what makes a business successful. Their speed at getting bills out, taking care of tag and title work and keener understanding of figures have earned them a slight salary increase.

In our body shop we reduced our staff by one metalman, saving $5,200 a year. Our body shop foreman now combines supervision with body work, and setting an

(Continued on page 144)

Chipping Away at the Overhead

Another in the series to aid you to stretch gross dollars into net.

By Baron Creager
Southwestern Editor

CONTROLLING overhead expense is much like enforcing traffic laws, in the opinion of Charles Harritt, Jr., owner-manager of San Jacinto Motors (Cadillac-Oldsmobile), Conroe, Texas.

"Better results are obtained through constant, more or less regular attention than from a program that is launched within the dealership, with much fanfare and emphasis, and then soon forgotten," he commented.

At least that is the experience of Harritt, whose dealership is a 60- to 80-car operation in his community, 40 miles north of Houston.

"At least every 90 days I get the bookkeeper to give me a breakdown on overhead expense and I give it very careful scrutiny," he explained.

"Quite often I find items under the heading of membership dues and publications — items that can be eliminated. It is my experience that if one does not watch such items, they can pyramid substantially over a period of a few months and, quite often, get out of hand.

"Last April my attention was attracted to an account in the financial statement that seemed obviously out of line. This was the 'cost of labor sales,' which had approached the 70% level. Our mechanics are paid on the 50-50 basis, so it was evident that this figure should not exceed 50%.

"Investigation disclosed that each of the four mechanics on the line had a porter-helper. In addition to that, the wash rack man was also helping out mechanics on occasion.

"The service manager had a good explanation, with considerable merit. He said that since he couldn't get more mechanics, he added the helpers, who could be of much assistance to the mechanics. This was true, but after going over the matter thoroughly, we found we could eliminate two porters with a fairly substantial weekly saving."

Harritt found, too, that in another phase of the dealership he could save $100 a year. This doesn't sound like big expense, he admits, but several items of this size can soon run into real expense, especially if allowed to go unchecked.

"Our laundry expense on shop towels had been going up and seemed to be out of all proportion to necessity," he continued.

"A more or less casual investigation of this situation revealed that shop towels were disappearing in all directions. They were in pockets of employees as they left the dealership and they were in employees' cars. Of course, I know they had no thoughts of appropriating these shop towels in that sense of the word. The fault was just as much that of management for being careless in control.

"So at the end of one week we gathered up all the shop towels and, the next Monday morning, issued five clean towels to each man who had use for shop towels. From that point on we required each man to turn in to the parts department the same number of dirty shop towels that he checked out in clean ones."

Harritt says he has reduced the light and electric bill by reminding employees that letting the lights burn and letting the fans run does not put a dime in any pocket except that of the power company.

"It just takes the money out of my pocket," he told them, "and anything that takes money out of my pocket is, eventually, taking money out of your pocket."

In this dealership, all advertising is now budgeted, but not on the basis of the same amount to be spent every month. At the time new models are introduced, when the factories are spending more for advertising, the dealership spends less. Thus the advertising budget is conserved for seasons when the dealership needs it most.

And in spending the advertising budget, this dealership favors, in this order: Radio, local newspapers, direct mail.

"There isn't much you can do about taxes, lease and such items," Harritt said.

"But by regularly taking a long look at expenses, even in a small dealership where overhead is not huge to begin with, you can find a spot here and there where a saving can be realized.

"Added together, such items over a year would account for an often surprising total."

Customer Labor Charges Rising?

With the rising costs of many things—not just cars—in many industries today, what's happening over the South and Southwest as to the flat-rate scales? In Atlanta, Ga., recently a number of dealers have kicked up their charges, some to as high as $5 an hour. Admittedly, to get and keep skilled men, a higher scale may be mandatory. Next month a survey in SAJ will report on labor-charge trends and the shop-volume picture.

How to Skin a Prospect

By CHARLES F. TURBIVILLE
Turbiville Motors, Inc. (Lincoln-Mercury)
San Antonio, Texas

Text of an address, "Ethical Selling Opposed to Deception," at the recent convention of the Texas Automotive Dealers Association. The speaker has been a franchised dealer for years, including at Beaumont, Houston and San Antonio. Earlier he was a car salesman at Austin.

MY TOPIC for discussion today is "Hard hitting ethical selling as opposed to deception."

I will attempt to the best of my knowledge and ability to give you some examples of both deceptive methods and hard-hitting ethical methods that are being used in selling automobiles in today's market.

How cars are sold deceptively (so I have heard, mind you): I am sure that you have seen new cars advertised at no down payments. You can advertise, sell and deliver all the new cars you can obtain to average credit risks with absolutely no down payment. Of course, it is necessary that you get cash for 36 months' insurance, approximately $200; cash for federal excise tax, approximately $200, and cash for state and county taxes of $50, making a total of $450, but you delivered the new car itself for *no down payment*.

Another way a new car can be advertised, sold and delivered for no down payment is to have all salesmen get a complete purchaser's statement—so complete in detail that the finance manager can analyze this statement and be able to tell what the victim owns in the way of furniture, television, washing machine, dryer, refrigerator, and even life insurance loan value. In other words, everything that this man might have for a rainy day, because, brother, it is getting ready to rain!

Deliver car with no down payment, wait three days, which will give the man's wife a chance to show the new car off to all her friends; the kids can show the new car to all the other kids in the neighborhood, and tell them what a great guy their daddy is; then have the salesman make his call to inform the victim that the finance company has turned down the deal, and unless something can be done, he will have to take the car back.

The best time to make this call is in the evening when all the family is together, because more hearts are broken that way. In most cases, after the family has finished their cry, they will agree that they should go ahead and take that money that had been saved for the next baby and put it on the car too.

I am sure that some of you have wondered how it is possible for the deceptive dealer to sign up the prospect and make him believe he is buying for $1,700 difference when cost requires and you have asked $2,000 difference on the same price class car. This is done in several different ways.

If the victim is a cash buyer, complete the deal with him, shake his hand, tell him how happy you are that he has been able to make such a wonderful deal; then let him in on the fact that federal excise tax and freight are extra.

If he is buying on time, it is simple; just add it to the payments; $9 per month for 36 months is hardly noticeable.

Another very easy way after delivery has been made is to change the note from what the victim has been led to believe is 30 at $65 to 36 at $63.82.

Now there is a definite purpose for the odd figure of $63.82. About four days after the car has been delivered, the victim gets a phone call from the man in charge of the department of good customer relations. This fine gentleman says, "Mr. Doe, I sure hate to have to bother you, but the salesman who sold you your new car is a little inexperienced, and he made a mistake in figuring your contract."

This great ambassador of good-will then will be silent for a few seconds. Everything done in this system of operation has a purpose. Now here it comes.

Mr. Doe blares into the telephone and says, "That is no problem of mine. It is your own hard luck. I cannot help it if you are stupid enough to hire people who can't add."

"But, Mr. Doe," says the ambassador of good-will, "all I wanted to tell you was that this salesman charged you too much. Instead of $65 per month, your

The "D-M-T System"—Deceptive, Misleading Thievery

How to deliver a car with no down payment.

Changing the note quietly from 30 months to 36 (and the strange case of altering the note from $65 to $63.82!).

How to make a customer believe he is buying for $58 per month when competition is asking $70 per month.

The technique of the "lowball" to beat competition.

How to keep customer from leaving salesroom floor or sales office when he tells you he has to go to work.

payments, according to our auditing department, should have been $63.82, and with your permission we are reducing them $1.18 per month."

There is another silence because Mr. Doe just doesn't know what to say. Finally, he mumbles an apology and expresses his sincere gratefulness because this has never happened to him before. He then tells his wife what wonderful people they bought their new car from, and that it just goes to prove how wrong she was for not trusting them at first.

Mr. Doe then becomes a wonderful ambassador of good-will himself by telling what fine, honest people he bought his new car from; then three weeks later when he receives his contract from the finance company, he thinks he is the one in error for thinking his note was for 30 months—besides, six months isn't very long anyway.

One hundred deals of this nature, however, amount to $30,000 for the dealer. Of course, about one out of 100 of these victims gets real nasty, and it becomes necessary for the executive vice-president to come into the deal and return $300 to this customer, which cuts the dealer's take to only $29,700.

How to make a customer believe he is buying for $58 per month when competition is asking $70 per month:

This can be done only when the competition has felt that the customer should have all the facts pertaining to the deal. He believes that customer should know that it is necessary to put a new license on his car and pay state sales tax on it. He believes the customer should know that insurance is necessary to a financial deal.

The salesman representing the other dealer, therefore, is taught to figure all contracts without insurance, license, or state sales tax. This type selling requires that the salesman build the victim's ego to the very highest point. He must tell him that he is the smartest buyer that he has come in contact with; that he knows more about buying a car than anyone he knows, and be sure to tell his wife how fortunate she is to have a husband like this, because she and her children will never have a worry about their financial welfare as long as this man is handling the business affairs of his family.

This is what is known as romancing; in fact, deceptive romancing and deceptive selling are very much alike, because both victims end up in the same condition.

After all tools, personal belongings, wife and kids are transferred from the old car to the new, then let the customer in on the fact that insurance is necessary and that if he doesn't already have a policy, you can easily add it to his payments. Do the same with sales tax and license, and this victim, after that terrific ego build-up, will never admit that he was not aware insurance, license and tax were not included in his deal in the first place.

As long as a dealer is practicing deception in selling to the public, he is missing a very good bet if he does not also sell deceptively to the finance companies. After all, finance companies are just about as gullible as the public; besides they have a lot more money.

Any dealer's finance manager looking at a deal before it is presented to the finance company can in nine times out of ten tell whether the deal is strong enough to be acceptable. If, in his own mind, he is afraid that the finance company is not going to accept the deal, it can be made a lot stronger appearing to them if he writes the man a check for $500, telling the finance company that the man is putting $500 cash in this deal, along with his trade-in. He then has the customer endorse the $500 check back to the dealer.

"As long as a dealer is practicing deception in selling to the public, he is missing a very good bet if he does not sell deceptively to the finance companies" *(and he tells how).*

In order to keep the records straight, the $500 is charged off before the end of the month.

Another remarkable example of deceptive selling in today's market is to take a customer completely out of the market for all other friendly fellow dealers. This method is known as the lowball, or, in some cases, is called the highball. Personally, I do not know the difference between lowball-highball, except that I do know a highball is what I am going to have as soon as I get out of this trap.

The way the lowball works is this:

After the salesman has offered to trade with the victim for, we'll say, $1,500 difference, but he has not been able to get the deal signed up and his sales manager will not let him go any lower, then as the customer is getting in his car, ready to drive off, the salesman writes on the back of his card $1,000 and says, "Now, we want you to buy a car, and make the best deal that you possibly can make. We want you to look around at other cars because we are interested in seeing you get a good deal, but here's one thing I would like you to keep in mind while you are looking. If I can get you a deal for $1,000 difference, would you trade?"

At this point the salesman is trying to get away from the customer as soon as possible, because he is not ready to have him back yet. When this prospect visits all the other dealers, the first thing he says is, "Now I want you to know that your competitor has offered to trade with me for $1,000 difference. Can you beat it?"

In most cases the salesman says, "Why the hell are you wasting my time? Why don't you go back there and buy?"

This all serves a very important purpose. The customer then becomes mad at the competition, which makes him very easy prey for the guy who did the lowballing.

How to keep customer from leaving salesroom floor or sales office when he tells you he has to go to work, or is due at his office:

One way is to lose the keys to his car. Some dealers I know throw them on top of the building.

Another good method is to hide the man's car, or tell him you were under the impression that they had already traded after all the work you had done getting him this good deal, and that you are as sorry as you can be, but you have already sold his used car, that you could not pass up the terrific price you got for it.

Another successful method is to get a deposit—the amount has very little bearing. Then when he wants his deposit back, tell him the treasurer of the corporation had to go to the hospital because his poor wife had an emergency operation, and the treasurer is absolutely the only person who can give him his money back.

We laugh at this; we think it is not a serious situation. We sit back complacently and say this type of operation cannot last long. People will become fed up. Let us not fool ourselves.

There is a way to start all over again. The deceptive operator in most cases is very careful not to

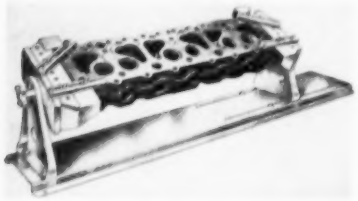
(Continued on page 130)

You can help make '57 a big year. Manufacturers were invited to show off their latest wares here. By modernizing your shop equipment and by calling on many of these new items, your service volume may be boosted to a new plateau in 1957.

800—Cylinder Head Holder

A rotating cylinder head holder reportedly designed to make any valve work easier by making the head more accessible, as well as by adding to the accuracy with which the mechanic can work, has been announced by Tobin-Arp Mfg. Co., 6400 So. Penn., Minneapolis 23, Minn.

By tightening four bolts, the cylinder head is firmly held, set and then



locked in any desired position. The "Tamco" is a one-man tool, thereby increasing the daily manpower output and decreasing danger of injuries, it was claimed. It accommodates all overhead valve cylinder heads up to 10⅜" wide by 6½" high by 37" long.

Want more info? Use coupon on page 102 and you will get it!

801—Service Desk

A service desk for a small-space area in the shop, which can be used for writing up job tickets, sales receipts, keeping parts records, parts catalogs, etc., has been introduced by Shure Mfg. Co., 1601 S. Hanley St., St. Louis, Mo.

All-steel, with hard baked-enamel white finish inside and out with red

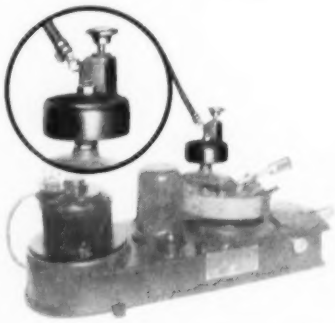
trim, the desk has a full back, a roller-mounted drawer and cabinet providing 25 cubic feet of storage space.

The inclined top measures 26" x 38", width is 38", depth 26", over-all height 57½" and desk surface height 44". It comes completely assembled, including fluorescent light and lettered banner.

Want more info? Use coupon on page 102 and you will get it!

802—Shoe Clamp Accessory

A shoe clamp accessory for its "Model 200 Safe-Arc" brake shoe grinder has been introduced by Ammco Tools, Inc., 2100 Commonwealth Ave., North Chicago, Ill.



The "Quick-Air" clamp provides for air-powered instead of manual shoe clamping and considerably speeds the shoe grinding operation, according to the company.

Want more info? Use coupon on page 102 and you will get it!

803—Transmission Tools

A bushing remover and installer set for all 1946-55 Hydra-Matic transmissions, which can be used to replace worn bronze and babbit bushings, thus avoiding entire unit replacement, has been announced by

the New Britain Machine Co., South St., New Britain, Conn.

The complete set includes a driver and five adapters for different bushings packed in a metal carrying case. The tools are precision made for accurate fit, the manufacturer said.

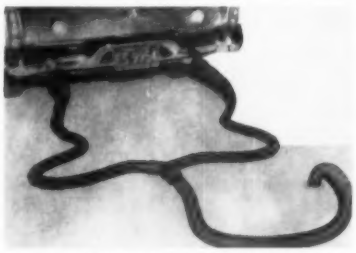
Want more info? Use coupon on page 102 and you will get it!

Requests from readers for more information on new products and bulletins in 1955 exceeded 25,000. If you want more data on any of the products and catalogs here, do not hesitate to use coupon on page 102

804—Exhauster System

An exhauster system, complete with hose and accessory items, for removing fumes from garages, shops and areas where men are working on cars and trucks, packaged for immediate snap-on assembly and use, has been announced by Durkee-Atwood Co., 215 7th St., N. E., Minneapolis 13, Minn.

Made of neoprene compounds, the hose reportedly resists heat, cold, grease and oils and is equipped with straight wall couplers and extensions



to exhaust fumes any distance required from one or two tailpipes. Molded "y" fittings handle extra leads from two exhaust pipes. Adapters provide airtight fittings over all tailpipes from 1¼" to 3" diameter. Hose comes in lengths of 4', 6' and 8' in 2" inside dimension with connectors which provide leakproof fittings with stovepipe connections, the manufacturer said. It serves both dual- and single-exhaust systems and also supplies dual-exhaust universal adapter for bumper-type exhaust system.

Want more info? Use coupon on page 102 and you will get it!

805—Wheel Weight

A truck and bus wheel balancing weight, said to be equipped with a different clip and designed especially for use on the outside flanges of the Goodyear 7.50 and 8.25 tubeless-type

truck rims, has been announced by Turner Mfg. Co., Box 566, Kokomo, Ind.

The weight, which comes in 4-, 6-, 8-, 12 and 16-oz. sizes, has serrations in the face which reportedly permit accurate sawing to obtain odd sizes, if required.

Want more info? Use coupon on page 102 and you will get it!

NEW PRODUCTS for NEW BUSINESS

806—Valve-Gapper Kits

Interchangeable valve-gapper adaptor kits which reportedly can be used to make micrometer-accurate valve clearance adjustments on practically all overhead-valve cars, trucks and tractors have been introduced by the P&G Mfg. Co., 305 N. E. Russell St., Portland 12, Ore.

Using a dial indicator to obtain exact valve clearance settings and to check the action of hydraulic lift-

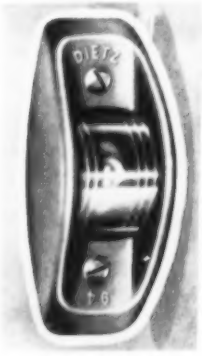
ers, the "Model 300" valve-gapper includes a horizontal dial indicator (for easier reading on V-8 engines) and a special indicator brake which enables the mechanic to stop the indicator hand as it registers the point of maximum valve clearance, for exact adjustments even at fast idling speeds, it was claimed.

Want more info? Use coupon on page 102 and you will get it!

807—Clearance Light

A clearance-marker light with interchangeable lens, available in either red or amber with prisms on inside and smooth outside surface to facilitate cleaning, has been introduced by Automotive Lighting Division, R. E. Dietz Co., 225 Wilkinson St., Syracuse 1, N. Y.

The light has a 3-candlepower bulb and is available in either six- or 12-volt systems. A solid aluminum



back plate will not rust or corrode and the heavy gray iron casting protects against damage, it was claimed. Clamp tabs on the bottom side of lens help hold the light in position until the housing can be screwed down securely. The wiring assembly, using a rubber compression grommet, eliminates the possibility of corrosion to the wiring assembly.

Want more info? Use coupon on page 102 and you will get it!

(More New Products on page 103)

They Built Up Service on Trucks

By Donley Lukens

OUT-OF-SERVICE time is an expensive inconvenience for the big truck operator. It can spell catastrophe for the small operator who is dependent upon his truck for his livelihood.

If it comes at a critical time, it can slow down or halt a manufacturer's production line, cause complaints or lost customers for the jobber or retailer, or lost crops for the farmer. At best it reduces operating efficiency and incurs costs not directly associated with the repair.

Recognizing this has enabled O'Dell Whittington and Clyde Cothern, president and secretary-treasurer, respectively, of City Sales Co., Inc., Wilkesboro, N. C., to build a truck service sales volume of approximately $40,000 a year. Sales of trucks and passenger cars and service are not departmentalized in the company's accounts, so no exact figure is available.

"Keeping trucks on the road where they earn a profit for their owners has been the foundation of both our new-truck and truck service sales," says Whittington.

"The smart truck operator is willing to forget mileage if you can service his truck and get it back on the job with less total out-of-service time than your competitor 40 or 50 miles away. That is not too hard to do if the competitor is apt to tie the job up for hours or days waiting for parts you carry in stock. All you have to do is carry a complete stock of parts for the trucks you service."

"A complete stock of parts for the trucks you service" is a big order. It involves a bigger inventory than the service sales of any small-town garage could justify. In this case it is a little over $20,000. It also requires an effective unit control system for the prevention of out-of-stock numbers.

City Sales Co. meets this situation three ways:

First, its unit control system is set up to provide a minimum of 30 days' supply of fast-moving numbers and at least two units of even the slowest-moving numbers of all recent models. The result is such phrases as "out of stock" and "on order" are for all practical purposes never used in the stock room. A mechanic who has been with the company several years said he had never heard them.

Trucks account for around $40,000 a year at this shop because of three steps taken.

Second, it confines service to the makes of trucks it sells. The only exception to this is regular customers who also have trucks of other makes.

Prior to 1949 the company sold the Federal truck. That year it obtained the International franchise and dropped Federal, but it maintained a complete stock of parts for Federal trucks until February, 1956. By that time few, if any, of the Federals it had sold were still in the hands of the original owners. Since then it has limited its stock to International parts except wheel bearings, overload springs and brake parts carried for several makes as an accommodation.

Third, the company encourages parts business from fleet owners and individuals who do their own work as well as from other garages, and goes to as great length to help these parts customers get their trucks back in service as it does to get work out in its own shops.

"Up to a few years ago there was hardly a night I was not up at least once, and sometimes two or three times, to get parts for someone so he could have his truck rolling in the morning," recalled Whittington.

"Now," he added, "It is R. C. Jennings, our parts man, who gets out of bed most of the time."

(Continued on page 96)

A complete stock of parts is basic to building truck service sales, according to Clyde Cothern (left) and O'Dell Whittington. Their parts department occupies what was formerly a seven-room dwelling apartment.

Right Tools and Equipment Mean Profit

By E. M. Lowery
Technical Editor

Directing a labor force of 100 persons at Lander Motors, Atlanta's big Dodge-Plymouth dealership, Ed Lowery and his 49 years' experience qualify him to relate here why it should be a "must" to be properly equipped.

WITH THE advent of the 1957 models we see the *more automatic* automatic transmissions, new torsion bar and ball joint suspensions, six-way seats, fuel injectors, superchargers, more sensitive brakes, etc. This should give us warning that only the shops that are properly equipped and have the "tech" knowhow can remain in "the running" when it comes to servicing these models.

Modern shop operators have already realized the need for special equipment and manpower training to get the job done properly, and at a profit. Guesswork and the "rule of thumb" average won't go on this late stuff. Gone are the days when we could use the handcrank to determine what was happening to the compression, or put a little bit of cork in the differential to quiet a gear noise.

Now we must have diagnostic equipment to enable us to locate the trouble, and special tools and equipment to make the necessary adjustments and repairs.

When a job comes into our shops for repair or inspection, we don't want to replace parts or perform labor operations unless it is absolutely necessary, so we must have the facts, not guesswork. Many shops think that special testing and repair equipment is too expensive. But is it?

Let's consider the experience of the superintendent of a large truck fleet:

One of the heavy-duty trucks had a habit of "cutting out" on one or two cylinders. The shop had played around with it for several days, during which they had made several road calls to get it back to the shop. Finally the superintendent called the foreman of one of the best-equipped shops in town and told him of his troubles, stating that they had done everything they knew to do, had installed new points, condenser, rotor and cap, and had finally replaced the entire distributor. Getting no results they had installed two complete sets of new spark plugs. Still no results, so they replaced the fuel pump and installed a new carburetor. It was at this point that he asked for help.

The job was brought into the equipped shop and five minutes after the testing equipment had been "hooked up," the trouble was located and two inexpensive secondary cables corrected it.

It would only take a few jobs like that to cost more that the purchase price of the necessary testing equipment. This particular superintendent realized this and his shop now has this equipment.

Then there was the case of the small shop which was low bidder on a badly wrecked late-model vehicle. Part of the damage consisted of a couple of brake drums. All necessary new parts were procured and installed, including two new brake drums. The sheet metal was straightened, painted and the job was ready for the final road-test.

The tester found that he could hardly keep his foot on the brake pedal due to its erratic movement. The car was returned to the shop and everybody put on their "thinking look." What could be wrong???

All damaged parts had been replaced with new material, so the mechanic pulled the wheels and "looked," reset the heel and toe adjustment, replaced the wheels and the job was again road-tested, only to be returned with the same trouble.

Again the brake shoes were adjusted and this time the master cylinder was overhauled. (Of course, this wasn't included in the "low bid"). Such experimental tactics went on until, if any value was placed on a mechanic's time, a job which should have netted a nice profit for the shop turned out to be expensive.

Finally the job was carried to a well-equipped brake shop for correction. Here, with the proper e-

(Continued on page 92)

A new 277hp "Rocket" engine powers this Starfire "98" Holiday sedan.

Oldsmobile Peaks at 277hp

NUMEROUS mechanical improvements have been incorporated in the 1957 Oldsmobile, which has undergone its most sweeping model change in 20 years, according to Harold N. Metzel, Oldsmobile chief engineer.

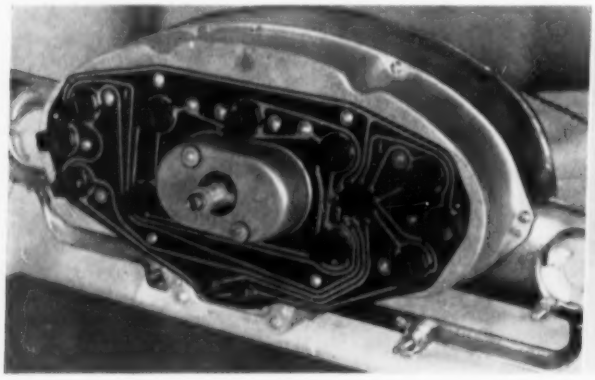
These include a new T-400 "Rocket" engine developing 277hp, new front and rear suspension to enhance roadability, 14" wheels and a heavier and wider frame to provide greater stability. There also are a new and more efficient dual-range heater, an easily serviced printed circuit for the instrument cluster and a better fine-fidelity radio with bi-phonic rear seat speaker.

The "Rocket" engine displacement has been increased from 324 to 371 cubic inches through lengthening the piston stroke by ¼" and increasing the bore diameter by ⅛" to 4". Horsepower is up from 240 to 277 and the four-barrel quadri-jet carburetor is now standard on the "Rocket" engine in all three Oldsmobile series. Maximum torque is advanced from 340 to 400 lb.-ft. at 2,800 rpm. Compression ratio has been raised to 9.5 to 1.

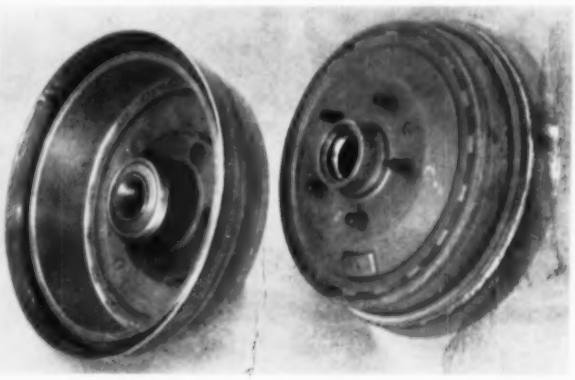
Engine exhaust ports are 20% larger to improve the scavenging of exhaust gases. Outrigger supports have been added to support the ends of the rocker arm shafts. This reduces shaft deflection, minimizes valve noise and improves valve mechanism durability. Valve guides are bored after rather than prior to assembly, allowing more accurate guide-to-seat relationship and reducing valve seat runout. Exhaust valves are made of an alloy steel which provides greater "hot strength." The exhaust valve head contour has been revised for greater flexibility and durability and to achieve reduced weight.

The crankshaft main bearing journal diameter has been increased ¼" to 2¾" to strengthen the crankshaft and provide more bearing area. The crankshaft flexplate for the Jetaway Hydra-Matic transmission has been redesigned from a square to a round type, improving the alignment, flexibility and durability, according to engineers.

Printed electric circuit for instrument cluster, the first in the industry, represents a major advance in automobile instrument wiring. Pattern of flat copper circuits is printed on an insulating plate which is the reverse side of the Oldsmobile instrument panel.



This new brake drum design reportedly improves brake life and efficiency and increases resistance to fading. Drum is flanged at outer edge to reach outside the tire for better cooling. Dished deflector, spot welded to backing plate, improves weather sealing.



Chrysler Is Lower

THE 1957 Chrysler and Imperial feature new road-hugging design with floors and seats dropped, allowing roofs to be lowered four to as much as five inches. Combining such innovations as twin headlights, three-speed pushbutton Torque-Flite transmission and a revolutionary new Torsion-Aire suspension, the Chryslers are offered in the New Yorker and Windsor series, plus an all-new Saratoga series in the middle-price range. They have 14" wheels, recessed lift-and-pull safety door openers, a combined heater-air conditioner and up to 40% larger windshields.

On the Imperials an anodized aluminum grille in small rectangular check stretches across the entire front, emphasizing width and lowness. Headlights are set in massive chrome cylinders beneath airfoil-like brows projecting from the fender. Twin lenses, mounted side by side in a chrome housing, allow light patterns to be more easily controlled for both city and country driving. One set is used for city driving, while both sets are used in country driving.

Three new V-8 engines—a more powerful FirePower V-8 in the New Yorker series, a new Spitfire V-8 in the Saratoga series and a new improved Spitfire V-8 in the Windsor series—offer higher performance and increased economy.

All four series of Imperials are powered by a new, larger hemispherical combustion chamber FirePower engine for maximum performance, ease and safety. Its displacement has been increased to 392 cubic inches, its bore to 4.0", its compression ratio to 9.25 to one, and its stroke lengthened to 3.9".

The Imperial and New Yorker engines develop 325hp, with a torque rating of 430 lb.-ft. at 2,800 rpm.

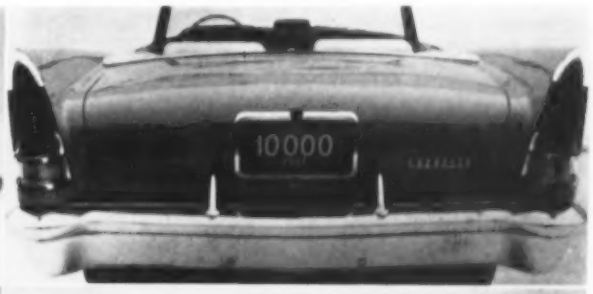
Other engines are: Windsor, 285hp, with 365 lb.-ft. at 2,400 rpm, and Saratoga, 295hp, with 390 lb.-ft. at 2,800 rpm.

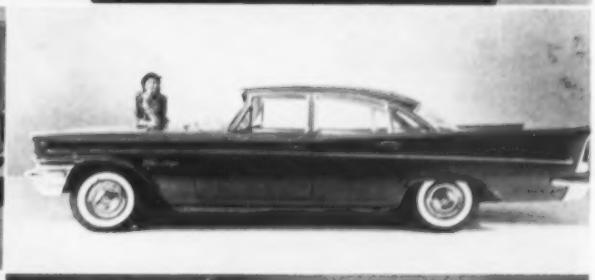
Features as standard equipment on all Imperials include improved coaxial full-time power steering, safety steering wheel, step-on parking brake, safety instrument panel cushion, power radio antenna, glove box light and electric windshield wipers which clear an area 38% larger than last year.

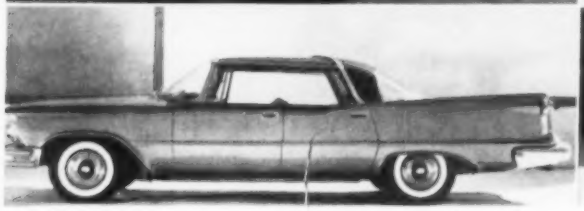
New inset safety door handles operate with a simple lift-and-pull

(Continued on page 82)

Below are some of the 1957 Imperial offerings: rear styling (top) is distinctive, with gunsight taillights, landau top, optional molded spare tire impression in low-sloping rear deck. This is the two-door Southampton hardtop. Imperials are powered by an enlarged 392-cubic-inch FirePower engine. In center: Imperials feature dual headlights. This is the Imperial Crown convertible coupe. Bottom: Here is the four-door Southampton hardtop with fashionable landau top. This is the first time an Imperial convertible is offered since the one made in 1951. Stabilizer-like fins of all '57 Chryslers are canted outward to terminate in tall, tapered taillights and back-up lights. Engineers said that tests revealed the fins give greater stability in cross winds at highway speeds. Center: The Saratoga is an addition to the line in the price range between the Windsor and New Yorker. It has aluminum-framed window openings and recessed door openers. Bottom: The New Yorker also has Torsion-Aire torsion bar suspension, twin headlights, the three-speed pushbutton Torque-Flite transmission and 14" wheels.







Mercury Sports B Shell

MERCURY sloughed off any resemblance to the Ford with its '57 models, going to a much bigger car (five inches longer, three inches wider and four inches lower) because of its adoption of the B body shell—the shell size of the Buick and Oldsmobile—in lieu of its former Ford shell.

Wheelbase is up from 119" to a new 122".

Soon to be backed up with its own assembly and engine plants, this division of Ford represents an over-all investment by Ford Motor Co. today of more than half a billion dollars, Board Chairman Ernest Breech asserted last month at Miami during the national dealer meeting.

Distinctively styled from its jet-flow bumpers and forward-thrust fender hoods, its sculptured steel body with projectile treatment on the rear fender, the Mercury for 1957 represents one of the most extensive model changes in history. Its "dream car" design is accentuated by the thin, crisp roof line. Despite its low silhouette, it has two inches more headroom.

Glass area has been increased 700 square inches.

Mercury offers a new floating ride with a multitude of new chassis suspension features.

A choice of two V-8 engines, 255 or 290hp, provides extra power, performance and durability.

Highest compression engines ever offered by Mercury, these new powerplants feature short-stroke, low-friction design that reportedly gives the utmost in acceleration at all speeds and still leaves more in reserve when needed. Compression ratio in both is 9.75 to 1.

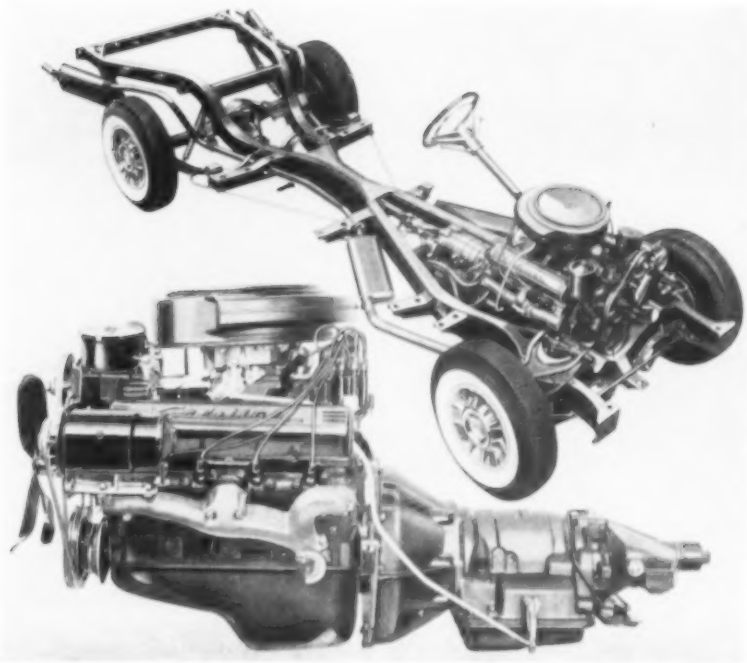
Most powerful is the Turnpike Cruiser V-8, offering 290hp and 405 foot pounds of torque, with a displacement of 368 cubic inches. It is optional with automatic transmission on any of Mercury's 15 models in its three series, Monterey, Montclair and station wagon.

A Safety-Surge V-8 with 312 cubic inch displacement which delivers 255hp is standard. This performer has torque of 340 foot pounds at 2,600 rpm and compression ratio of 9.75 to 1.

A greatly improved induction system is one of several engineering advances that assures smooth response throughout the driving range. All engines feature a new low-silhouette, four-barrel carbu-

(Continued on page 148)

At top of page is a Montclair Phaeton sedan. At top below: This rear view of the Montclair sedan shows the massive twin jet-pod bumpers and the projectile-shape rear-fender treatment. Roof overhangs the front and back. At bottom: Hardtop styling is achieved in the new station wagon, with a lone, canted center pillar on each side.



Top: Cadillac claims a new concept in frame design in the '57 chassis shown here. This is the reason the new Cadillac is as much as three inches lower. Engineers said it adds torsional rigidity while taking away no passenger room. Body is secured to the "outrigger mountings" on this frame rather than conventional siderails. Above: This engine has a compression ratio of ten to 1, four-inch bore and displacement of 365 cubic inches, developing 300hp. The transmission is an improved "controlled coupling" Hydra-Matic. Eldorados offer a 325hp engine.

Cadillac Alters Frame

A NEW silhouette, as much as three inches lower, is one of the more dramatic features of the 1957 Cadillac. And a revolutionary new frame is the reason.

This frame, appearing for the first time on an American car, is a new design concept for lower cars. The body is secured to outrigger mountings in contrast to former years when the body was secured to siderails. Technically it is called a tubular center-X frame.

Not only does the frame satisfy the demands of styling, but additionally it contributes greater torsional strength without a weight penalty when compared with the former frame with siderails, engineers said. Furthermore, there is no encroachment on passenger room or comfort.

Basically, the frame includes a tubular backbone from which armlike beams V-out forward and rearward. The outrigger mountings or brackets extend out from the box-type beams.

The lengthening of the center tubular section provides the flexibility which is one of the significant features of this frame in that it is readily adaptable to the varied wheelbase lengths and models. In all, Cadillac uses three different wheelbases on nine models.

As the tubular center is lengthened from the standard 129.5" wheelbase of 1957 models, rigidity further improves in contrast with the 1956 frame. For example, take the 149.75" frame of the Series 75 Limousine. The new 75 frame weighs 3½% less than in 1956, yet the torsional rigidity is improved 18% and stiffness is greater by 16%, engineers said.

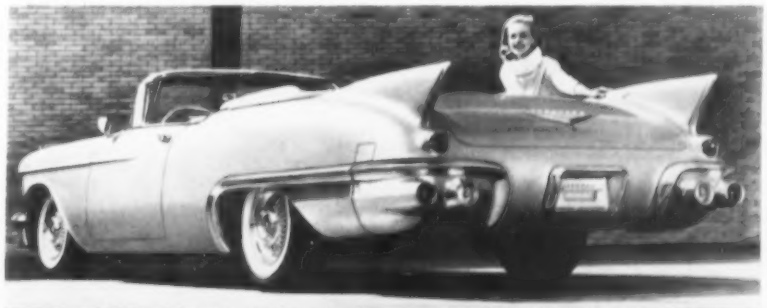
Another functional advantage is that this frame is well suited to construction of four-door hardtop models. This is of considerable significance to Cadillac in that all 1957 four-door models, with the exception of the Series 75 Limousine, are hardtops.

The advantage of this frame is that the structural strength comes at the centerline of the car and as a result there is more height and width available out at the body rocker panel for the attachment of the body's floorpan cross-bars. This provides a stronger anchorage for the stub pillar which is used on the four-door hardtops even though the pillar is reduced in height.

Three major changes appear

(Continued on page 76)

Top: Styling remindful of the "dream cars" appears on this 1957 Eldorado Biarritz Convertible. Not only are the fins set inboard but the bumper is built in and wraps around to the rear wheels openings. Biarritz offers the 300hp engine or a modified version which develops 325hp. Bottom: The Sedan de Ville is two inches lower for '57.



Turn several screws and you can remove the upper panel above the instrument panel, enabling servicemen to work downward in plenty of light on the 1957 Buicks. For the first time the Dynaflow quadrant has been placed on the instrument panel directly above the steering column. Deep-cradled steering wheel is smaller to permit greater visibility.

Buick Hits 300hp

A NEW, 364-cubic-inch, high-compression V-8 engine is featured on all 1957 Buicks.

The engine, which has a cubic displacement increase of 42" over last year, gives the Special one of the largest engines of any car in its price class.

This engine, equipped with a four-barrel carburetor, generates 300hp in the Century, Super and Roadmaster, with 10-to-1 compression ratio. This is an increase of 45hp over last year. The compression ratio has been increased from 9.5-to-1.

In the Special series the engine develops 250hp, up from 220 last year. The Special series engine is equipped with the conventional two-barrel carburetor and has a compression ratio of 9.5-to-1.

The maximum torque output is up, too. The Special engine has been increased from 319 to 380 foot pounds at 2,400 rpm, and the powerplants of the three larger models from 341 to 400 at 3,200 rpm.

The displacement of 364 cubic inches, advanced from 322 in 1956, is due in part to lengthening the stroke of the crankshaft from 3.2 to 3.4". The diameter of the bore was increased similarly, from 4 to 4.125", and the cylinder bank heightened .25". Rods on the engine are .1" longer and the crank has thicker counterweights for greater strength and durability.

In other engine improvements, the fuel pump has been inverted to locate its head in a cooler spot and a vacuum booster has been added to the underside of the oil pump to provide greater windshield wiper power.

Intake and exhaust valves have been enlarged to furnish higher output and greater breathing capacity. Dual exhaust manifolds are standard on Roadmasters and optional on the three other series.

Newly-designed mounting systems for the engine and variable pitch Dynaflow transmission are increased in area to accommodate the greater torque and smooth out vibration to give the powerplant the "same feel of softness," engineers said.

A safety minder, which automatically sets off a buzzer when a predetermined speed is reached, is offered as a safety feature on all 1957 Buicks.

The safety minder, part of the speedometer, is standard on the Roadmaster and optional on all other series. It can be set at any speed desired merely by turning a knob on the instrument panel.

All of the cars have been reduced in height. Some models are as much as three and three-eighths inches lower than last year, without any sacrifice in ground clearance. Headroom remains the same and legroom has been increased in the four-door hardtops.

A brand-new estate wagon, designed in the same racy, hardtop styling as the other models in the line, is offered in the Century and Special series.

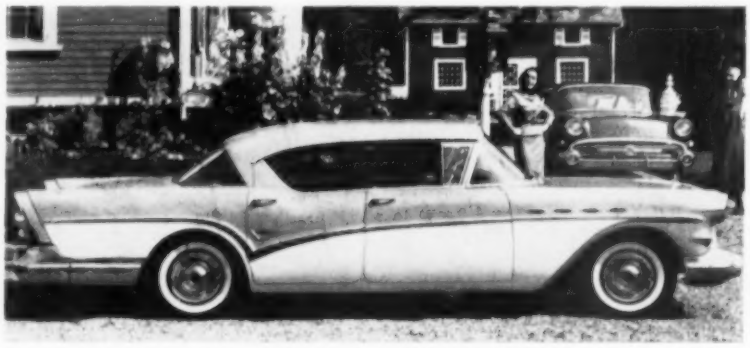
The new styling presents new front and rear design, bigger panoramic windshields with a more rakish slant to the pillars, new bumpers—both front and rear—and three-piece back windows on the Special, Century and Roadmaster.

One-piece panoramic back windows are standard on supers.

Newly-designed ventiports, new sculptured sweep-spear molding, and full rear-wheel cutouts, Buick hallmarks, have been retained on all models.

The rear body pillar on the Roadmaster and Super series is wider and slopes forward from top to bottom, lending a racier appearance to the over-all styling.

This Super four-door hardtop is powered by 300hp V-8 with 10-to-1 compression ratio. All cars are lower and glass area has been increased.



Plymouth Adds to Wheelbase

PLYMOUTH models for 1957 are as much as five inches lower than corresponding 1956 models. The wheelbase has been lengthened from 115″ for all models in 1956 to 118″ for standard models and 122″ for Suburban station wagons in the 1957 line.

The new car has the appearance of greater length which comes from functional styling. A broad hood, soaring tail fins and forward thrusting headlight brow all contribute to the impression of length.

In chassis design, Plymouth has accomplished its most significant change since the introduction of independent front wheel suspensions with coil springs in 1934. The feature is called Torsion-Aire.

In the over-all redesign of the front suspension, coil springs have disappeared. They are replaced by torsion bar springs which together with other equally basic improvements in both front and rear, produce a new kind of ride and new "handling."

The completely new front suspension and steering system creates a remarkable degree of stability under forces of acceleration, braking and cornering. At the same time, according to Plymouth engineers, the vehicle is more softly sprung than ever before. For the first time on an American passenger car, ball joints are combined with torsion bar springs to create a combination of ride and handling characteristics. A new rear suspension incorporates relocated leaf springs, which contributes to the new better ride.

All of the 1957 Plymouths have more powerful engines than 1956 models. The standard V-8 for all models except the Plaza is the new Fury 301, the number signifying displacement. It develops (with power pack) 235hp at 4,400 and maximum torque of 305 at 2,800 rpm. The Plaza V-8 retains a displacement of 277 cubic inches but, like the Fury 301, has a new camshaft, new carburetion and other innovations to achieve increased performance and economy. The latter develops 197hp at 4,400 and maximum torque of 270 at 2,400 rpm.

The compression ratio of the

(Continued on page 132)

Below: The sport coupe and, at bottom, the new Suburban.

The 245hp Firesweep joins the Fireflite and Firedome this year.

DeSoto Adds a Third

DeSoto has introduced an all-new, lower-priced Firesweep, a third model that makes the company's 15-car line the largest ever offered in the division's 28-year history. All 1957 DeSotos are 5″ lower.

The lower-priced car features many advances, including a revolutionary new suspension system, a newly designed V-8 engine, a triple-range pushbutton transmission and an all-weather new air-conditioning system.

A highlight feature of the new Firesweep is a 122″ wheelbase incorporating a number of revolutionary suspension advances. This results in the smoothest, most comfortable ride possible and is termed "Torsion-Aire."

Mechanical torsion bars replace conventional front springs, save space and reduce weight by 30%. Safety-Sphere joints reduce steering gear friction, greatly reducing steering effort. An anti-brake dip device, which reduces forward pitch by 65%, is likewise standard.

The Firesweep will have 245hp with a power pack installation that would bring it up to 260hp. Top power will be found in the Fireflite model with 295hp and the new Firedome will provide 270hp.

An all-new transmission will be introduced. The Torqueflite three-speed fully automatic transmission (standard on all Fireflite models and optional on Firedome and Firesweep) combines torque converter with planetary gear trains and is controlled by five manually-operated pushbuttons. An improved Powerflite transmission, controlled by four pushbuttons, will be optional on the Firesweep line only.

Fourteen-inch tires with 22 pounds of air are another new introduction on the 1957 models with a larger tire cross section, creating a softer ride. The 23-gallon fuel tank is another improvement.

DeSoto's new dual headlamps will improve and increase vision by the 50% more wattage on the new headlight system. In the past DeSoto headlights had 100 watts and new headlights have 150 watts. The increased wattage on the low beam alone will reportedly result in 75′ more visibility for drivers.

The new combined heater and air conditioner by its very compactness has resulted in more flexibility and ease of control with one central control on the entire unit. This system uses all fresh air with the exception of the occasion when maximum cooling is required.

All suspension components are isolated from the heavily reinforced frame by rubber bushings. This greatly reduces road shock, provides quieter operation and minimizes lubrication points from 23 to only eight.

The Firesweep V-8 powerplant has a 325-cubic-inch displacement, 8.5 to 1 compression ratio and a new "high-intensity" camshaft. Its polyspheric combustion chambers give higher thermal efficiency and provide economical operation with "regular" gasoline.

The Fireflite and Firedome V-8s have a displacement of 341 cubic inches and compression ratio of 9.25 to 1.

Fireflite and Firedome have a wheelbase of 126″ and over-all length of 218″. Firesweep models are 215.8″.

Windshield glass area is increased 32% over 1956.

Some highlights of the 1957 models are seen in this grouping. Upper left is the soaring and canted rear fenders with the triad lights. Upper right is the massive new front grille and bumper. In the center is an over-all shot of the Firedome four-door, showing the new color sweep and new body lines and expansive rear window. Below are (l. to r.): the capacious trunk, the dash panel with its "Accuribbon" horizontal speedometer and to the left of the dash is the triple-range pushbutton transmission mechanism, the wider and higher windshield curving at top and sides for 36% more vision, and, last, the optional dual horizontal headlights which are being made available for 1957.

Dodge Drops 5"

Top: Lowest-priced is the Coronet two-door club sedan. Swept-wing rear fenders keynote Dodge styling for 1957. Center: The Royal four-door sedan is one of four different four-door sedans in the line. Glass area has been increased up to 53%. Above: The Lancer hardtop is 5" lower, with the result that this Dodge stands no more than 4½' high.

WITH the roofs of 1957 Dodge cars lowered by as much as five inches without sacrificing headroom, comfort, accessibility or road clearance, the question is: How did they do it?

For one thing, said Dodge Chief Engineer Dean Engle, there is no truth to the frequently-heard statement that the use of smaller, 14" tires is responsible. Actually, he explained, the decision to use the smaller but wider tires was based on a desire to get "more rubber on the road" and not to reduce car height.

The use of torsion bars in place of the old and bulky coil front springs permitted many front-end elements to be shifted and made more compact, he said. A new and much smaller air cleaner also helped to lower the car's silhouette, as well as a floor that is recessed in the car frame. Other design changes made better use of previously wasted "dead" space and cut inches from the over-all height.

Result, Engle said, is a car with a much lower center of gravity, better driver control, less sway in cornering—and much greater safety.

Horizontal steel torsion bars have replaced the upright coil-type springs, and the new springing is achieved by slightly twisting these sturdy, straight bars. The torsion bars give a smoother, softer ride, last longer, require less maintenance and occupy less space.

Rear leaf springs are mounted outside the frame rather than inside, substantially increasing the car's stability and reducing sway on turns.

Suspension and steering systems of the Dodge, as well as the engine, are completely isolated from the frame with rubber insulation to eliminate metal-to-metal contact for smoother, quieter performance.

Dodge's new Torque-Flite push-button transmission gives livelier response in both acceleration and engine braking, and a smooth get-away performance.

Five selector buttons for Torque-Flite are located conveniently on the left side of the instrument panel, with "first," "second" and "drive" forward ranges, plus neutral and reverse. The "drive" range is used for 95% of all driving. "First" provides maximum power for sand or mud, or top engine-braking for descending long, steep hills. "Second" may be used for acceleration or for engine-braking on lesser grades.

Roof lines are thinner to accent the swept-wing look, but the roofs are stronger, yielding substantial improvement in driver visibility.

The larger windshields wrap around at the bottom as well as the top, and on 1957 Dodge convertibles they also curve into the roof itself.

To further increase driver and passenger visibility, windshield wiper blades are four inches longer, clearing 38% more area. The variable-speed wipers are electrically operated to guarantee constant action in all driving conditions.

The low, wide hood of the 1957 Dodge improves forward visibility, and the rear-view mirror has been moved to the base of the windshield. A full width back window wraps entirely around to slender, sloping corner posts, eliminating old blind spots and affording the driver a good view of both rear fenders. For winter, a rear window defroster is available.

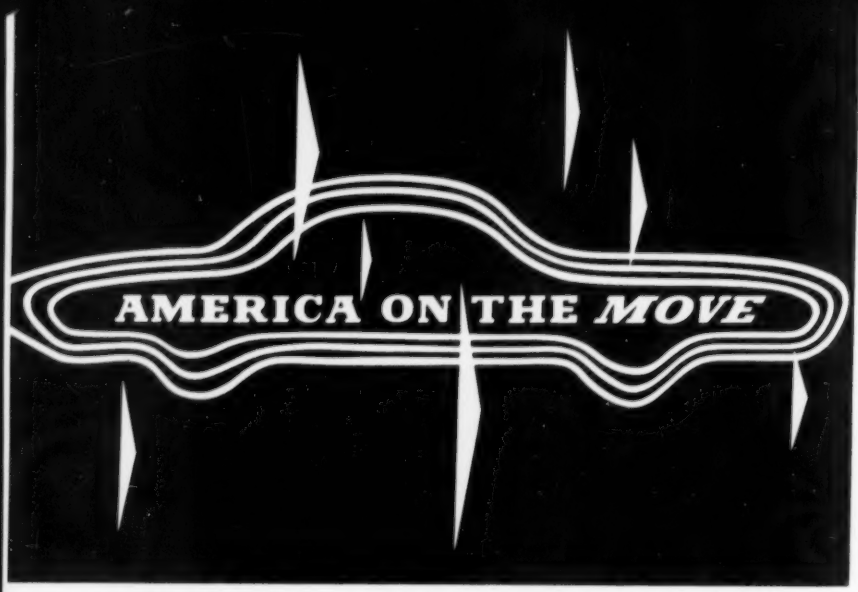
All instruments are clustered conveniently in front of the driver, beneath a raised hood shielding against windshield glare.

Fourteen-inch tubeless tires are standard. The larger tires, mounted on smaller but wider safety-rim wheels, provide a double tread on the road surface for greater safety.

New floating-shoe total-contact brakes are safer to operate, easier to use and more economical to maintain. The new brakes give 30% longer life and require one-fourth less pedal effort, engineers said.

Dodge offers a new line of engines. Displacement of the Red Ram V-8 has been increased to 325 cubic inches and the compression ratio to 8.5 to 1. The Super Red Ram engine (power pack) for Custom Royal models is equipped with four-barrel carburetor, dual exhausts and extensions, special distributor, special

(Continued on page 148)



This will be the theme of the first postwar National Automobile Show.

A 40-YEAR prewar tradition returns to the industry next month with the first National Automobile Show to be staged since the one held in 1940 at New York's old Grand Central Palace.

Like proud mothers at a baby show, the manufacturers of trucks and automobiles will roll out their offerings on Dec. 8, and before the doors close at Manhattan's new, mammoth Coliseum Dec. 16, hundreds of thousands are expected to have oohed and aahed.

No experimental models, but rather the current production units, will be permitted. Mercury's Turnpike Cruiser, a car of unusual features, will make its debut, but it is expected to be going into regular production by that date.

Commented William J. Cronin, managing director of the sponsoring Automobile Manufacturers Association:

"Resumption of the industry-sponsored show this year will climax one of the greatest decades in automotive history—a decade that matches in many ways the full 50 years of progress commemorated by the industry in 1946."

To make this new show particularly attractive to producers of motor trucks and buses, the entire first floor has been allotted to commercial vehicle exhibitors. Particular attention is being given to directing the audience through the truck display area. Special budget provisions have been made for the development of interesting institutional displays in this area.

Excellent decoration of the Coliseum, including the creation of a spectacular stage, will reportedly produce the finest "showroom" possible for display of the industry's wares.

An outstanding stage presentation, performed by topflight New York show people and entertainers, will be presented six times daily.

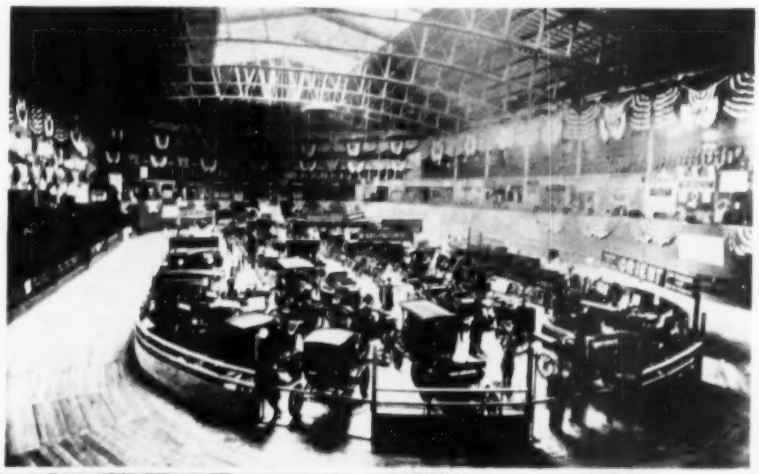
Corollary activities will include revival of the annual A.M.A. show banquet in the Grand Ballroom of the Waldorf-Astoria Hotel on Thursday, Dec. 6. More than 1,500 leaders of business, finance and government will attend this affair, which will be the social highlight of the show, as well as a significant news-producing event.

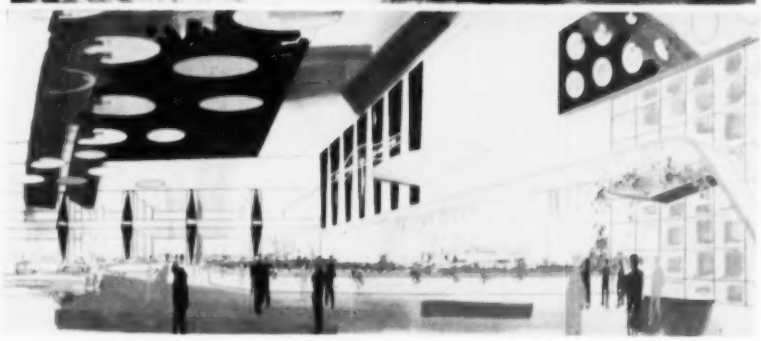
The Coliseum, on Columbus Circle between 58th and 60th Streets, is rated as the largest exhibition building of its kind in the world, with 300,000 net square feet of interior exhibition space on four levels.

In a brief review of the show's history, Cronin said that the first official indoor exhibition of motor cars in America was held by the old Automobile Club of America in New York's Madison Square Garden, Nov. 3 to 10, 1900.

Later that same year, the newly formed National Association of Automobile Manufacturers put on another show at Grand Central Palace. In 1901, the ACA again sponsored a Madison Square Garden show, but none was held in 1902. From 1903 to 1940, however, a national show was held in New York every year.

At top below: Here's how the show looked in 1900. Grandpa likely drove Bess there to see what those crazy mechanics had dreamed up for him. Bottom: An artist conceives the '56 show as looking about like this.





Studebaker Offers "Firsts" in Low-Price Field

Two important new engineering developments are being brought to the low-price field for the first time by Studebaker. They are:

1.—Variable-rate control of front-coil springing (see page 15), achieving for the first time in an American automobile the long-sought advantages of stiffer springing action for smooth negotiation of rough road surfaces and softer springing for better boulevard riding.

Standard on all sedans, the purpose and effect of the new spring development is to give the same degree of soft ride with one to five passengers as is obtained by conventional coil springs only with a heavy load. Principle is that individual coils compress one by one at an unequal rate, rather than at the same rate.

2.—A twin-traction rear axle (optional equipment on all V-8 models) which automatically divides engine power between the rear wheels in the proportions necessary to stop wheel slipping and spinning under adverse driving situations such as mud, snow and ice. Up to 80% of engine power driving force is transmitted to the rear wheel with the best traction. This compares to a conventional axle differential which lets power go to the wheel with the poorest traction.

New models for Studebaker this year are four-door station wagons opposite the President and Commander series as Studebaker station wagons continue to take a major share of production—last year 10%.

The most powerful engines in Studebaker history will power the 1957 cars to maintain the company's leadership in engine performance combined with economy. Three powerplants (225hp, 195 and 101hp) will be used—the Sweepstakes 289-cubic-inch V-8, whose torque is 305 @ 3,000, for the President series, 259-cubic-inch V-8 for the Commander series (260 @ 2,800) and 185.6-cubic-inch six-cylinder economy engine for the Champion series (152 @ 1,800). Horsepower and torque ratings are up to provide greater acceleration and passing power. Compression ratio in all V-8s is 8.3, compared with 7.8 last year.

Studebaker restyling for 1957 with new front and rear end treatments and side appearance emphasizes the new big-car design to which the company has moved in its family sedans and station wagons.

A supercharged Golden Hawk with advanced styling and the highest horsepower-to-weight ratio of any American production car heads the Studebaker 1957 line of sports-type cars.

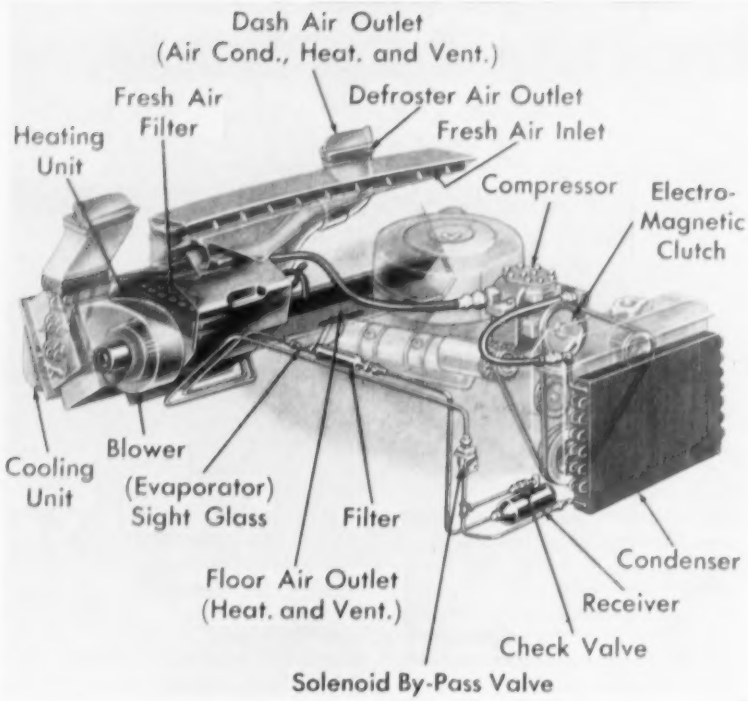
The long, low cars with European-flavored styling are in sharp contrast to Studebaker's standard line of family sedans and station wagons which have a big-car American design.

The 1957 Hawk line, covering three price brackets within the low-price field, consists of the Golden Hawk hardtop with a 275hp supercharged 289-cubic-inch V-8 engine (333 @ 3,200), Silver Hawk coupe powered by a 225hp 289-cubic-inch V-8 (300 @ 2,800) and the Silver Hawk six with a 101hp 185.6-cubic-inch in-line engine (152 @ 1,800).

Along with the advanced design supercharger (see page 11), the Hawks will have two engineering advancements being introduced on Studebaker cars for the first time in the low-price field — the variable-rate front coil spring and the non-slip power-driving safety differential.

(Continued on page 90)

The Hawk line, as seen across the top below, has gone even more streamlined. At left is the Golden Hawk, lead model in the company's line of sports-type cars, and at right the Silver Hawk. Both have a 289-cubic-inch V-8 engine, with a supercharger on the Golden Hawk. At bottom left: The Studebaker President Classic heads the restyled sedans. Sedans include the two- and four-door President and Commander V-8 models and Champion six-cylinder models. At bottom right: New to the 1957 lines is this four-door station wagon, named the Broadmoor. Other models are four-door Provincial, two-door Parkview and the two-door Pelham, the latter with the economy six-cylinder engine. Models were displayed November 1.



A new receiver tank in Nash's All-Season air-conditioning includes a built-in filter and check valve which eliminates tubing joints and thereby reduces leakage problems. Cooling system has been redesigned.

Nash Refines Cooling

THE low-cost All-Season air conditioning for the 1957 Nash has been redesigned.

The unit has a new compressor with a built-in muffler system for quieter operation. A new receiver tank incorporates a built-in filter and check valve, which eliminates tubing joints and thereby reduces leakage problems.

The Nash has a wider front tread, 59 1/16", which results in even better riding comfort. The long, frictionless coil springs are used on all four wheels.

A new V-8 engine which develops 255hp (35 above the '56 Nash) powers the 1957 Nash Ambassador. Three transmissions—Flashaway Hydra-Matic, overdrive and synchromesh—are available.

Bore and stroke are 4" by 3¼", with displacement of 327 cubic inches, compression ratio of nine to 1, maximum brake horsepower of 255 @ 4,700 rpm and maximum torque of 345 @ 2,600 rpm. Carburetor is downdraft, four-barrel type.

The Nash utilizes a four-headlight system, which has been called the "greatest advance in automobile lighting since the advent of the sealed-beam unit." Each lamp measures 5¾" in diameter, compared with the 7" diameter of conventional headlights. All four lamps are used for the high beam, while only the upper two are used for the low beam.

Actual night driving tests made by American Motors showed that the new system supplies up to 100 extra feet of illumination, while at the same time concentrating the light in such a way that oncoming drivers are not "blinded." The upper lights direct more light down the right side of the road, and the two lower lamps probe down the highway.

The new models have 14" wheels, instead of the customary 15". The tire size has been increased to 8.00 by 14.

Steering has been improved with a new 18-to-1 ratio gear box, offering more responsive handling qualities.

Tailpipes on the standard twin-exhaust system point downward and are hidden by the rear bumpers.

Four models are available in 1957: Ambassador Custom Country Club hardtop, Ambassador Super Country Club hardtop, Ambassador Custom four-door sedan and Ambassador Super four-door.

Below: This Ambassador Super four-door sedan is the lowest-price model in the '57 Nash line. It's powered by a new 255hp V-8. Like all Nash cars it reportedly has the widest seats in the industry—almost 5½'. Wheelbase measures 121¼". At bottom below: The Ambassador Country Club hardtop sedan, like other new models, is 2" lower than in '56.

New Engine Offered by Pontiac

Top: Over-all length of this Star Chief Convertible is 213.8". It has Morrokide upholstery, the leather-like material which reportedly is impervious to weather. Two-tone exterior combinations are offered in 56 choices. Center: The custom Catalina sedan. Above: The Super Chief four-door sedan. The cars were shown to the public early this month.

THE 1957 Pontiac features an entirely redesigned V-8 powerplant.

Of prime importance is the increased piston displacement—from 316.6 cubic inches to 347.04 cubic inches. This was accomplished by lengthening the piston stroke from 3¼" to 3-9/16". The longer stroke is accomplished through the design of the new crankshaft and, to meet design requirements, a new piston was developed.

Of special heat treated "Armasteel," this crankshaft provides the longer stroke for increased displacement, has larger bearing diameters, and counter-weights are modified to meet balancing requirements. To insure rigidity, bearing overlap is continued between main bearing journals and crankpins.

Pistons are entirely new, with steel band, thermal-controlled design to meet established dimensional requirements. As in the past, Pontiac pistons are tin plated, which guarantees maximum wearing surface and prevents scuffing. A new three-piece oil ring, with chrome plated side rails and assembly detail, insures more uniform spacing of the oil ring with respect to the piston oil ring groove. The result is more consistent oil control. Heavily chromed upper compression rings are used for maximum durability.

Engine heads have been redesigned and include several improvements. Most significant among these changes is the adoption of a completely machined contoured combustion chamber having special profiling around the intake and exhaust valves. This provision reduces restriction in this critical area and therefore improves valve breathing.

Volume in the spark plug area has been increased to facilitate fast burning. A venturi-type inlet throat, leading to the combustion chamber, has been adopted and passages leading to the combustion chamber have been enlarged and streamlined.

Intake manifolds, exhaust manifolds and carburetors also have been redesigned and importantly improved.

The engine with two-barrel carburetor delivers 252hp and is available on the Chieftain series. The engine with the four-barrel carburetor delivers 270hp and is available on the Star Chief and Super Chief series.

To minimize the possibility of excessive oil consumption occurring under operating conditions, causing high intake manifold vacuum, such as coasting or city driving, intake valves have been vented to the atmosphere. This new design admits the atmosphere to a space between the intake valve stem and valve stem guide through a drilled hole in the cylinder head, thus preventing any vacuum within the intake passage from drawing lubricating oil into the combustion chamber through the clearance between the valve stem and stem guide. (See page 168.)

To meet operating requirements of the increased engine displacement, engineers found it desirable to design a heavier and stronger cylinder block in 1957. Additional iron has been cast in the area of the bearing bulkheads and the block is reinforced throughout for durability and rigidity.

Intake and exhaust valve head diameter is .100" larger, insuring better engine breathing and efficiency. Over-all length of the valves has been increased .102" in keeping with necessary valve train modifications resultant from compression ratio increase. As in 1956, intake and exhaust valves are aluminum treated, rendering them more resistant to the detrimental effects of gas deposits and high temperature. Consequently the possibility of failure due to pitting and burning is reduced.

Both intake and exhaust valves are equipped with oil shields as well as oil seals on all valve stems.

An important development in ignition is the new distributor. Its inherent features permit greater accuracy in adjustment and easier, faster service. In the new design, points are serviced in sets — preassembled — requiring only adjustment of dwell angle when the unit is replaced.

SOUTHERN JOBBERS *and* FACTORY MEN

Why the steady net profit gains here?

Sales Analysis Sheet Is "It"

By Beatrice Miller

THE greatest single effective practice to bring about a gain in net profit of 13.7% for the first six months of '56 over '55 and gains in preceding years (11.1% in '55 over '54) has been a sales analysis sheet of his territory by each salesman at the opening of a new year, according to Carlton F. Staples, vice-president in charge of sales and credit, at Valley Distributors, Inc., Winchester, Va.

Prepared on a standard form, the survey comprises a breakdown of accounts and prospects in the major lines. The report affords direction of appropriate promotional material to prospects, the visiting of prospects by missionary men aside from time spent on regular accounts and the concentration of effort where it will do the most good.

Defining a prospect as one who buys 50% or less of his volume in an item from Valley Distributors, the company also includes in its annual study brands of competition to be met at prospects.

Doing an annual $1,500,000 gross at its two locations in Winchester and Harrisonburg, Va., Valley Distributors covers 11 counties in Virginia and seven in West Virginia.

"A glance at a territory analysis sheet lets us know at once how well a salesman is doing," said Staples. "A long list of prospects and short list of accounts require some explanation — some analysis — to find out what is wrong in his approach, techniques or salesmanship in our major lines.

"Perhaps he has too large a territory and could do a more effective job if his area were reduced. A record on black and white is a telling picture of how well he is doing with his potential. It spurs him into greater activity with prospects. It gives him a critical look at himself. The greater his success with new accounts the higher his earnings. The survey has proven an invaluable guide to both company and salesmen."

Knowing then at the beginning of the year the extent of the challenge and specifically the job ahead for the next three months, a salesman can concentrate on a prospective lubrication account, piston ring or brake lining prospect. A salesman's line of action will be the result of a conference with his sales manager where they have taken the facts apart for new and fresh, vigorous approaches. With his copy of the analysis sheet

Often at a salesmen's meeting like this Sales Manager Carlton F. Staples (center) has a salesman's privately recorded "sales pitch" played so all hands can criticize and benefit from the over-all remarks.

At the beginning of 1957 the personnel at Valley Distributors, Inc., part of whose Winchester counter is shown here, will know exactly what the challenge is to the company for each of its major lines.

in front of him, a salesman can check off his advances.

At the end of the three-month period a conference between salesman and sales manager takes place, and against the Jan. 1 analysis figures, progress can be seen. From time to time drives paying double incentives for new accounts add extra stimulus.

"We often have the manufacturer's representative accompany our salesmen in their calls on prospects, and the analysis sheet helps them, too. It lets them know beforehand what competition they are going to meet and how to prepare for it," added Staples.

A sales comparison sheet is also maintained with a breakdown of monthly and cumulative sales volume per salesman, percentage of progress per salesman in major lines, percentage of gains over the corresponding period of the previous year in major lines sales volume, and in total over-all volume. Thus, in month-to-month figures the entire operation can be studied both minutely and in over-all picture.

"We set a salesman's quota by the sales potential in his particular territory of parts per car registered in accordance with national figures as given to us by the manufacturers, and by sales volume done the previous year. This furnishes us a guide as to what we should expect of ourselves and a standard to measure the results of a salesman's activity," explained Staples.

What aids are given their 12 salesmen to fulfill expectations?

Five years of wholesale experience embracing a sequence of advances from the receiving, shipping and counter departments within the organization precede a relief man's first experience selling in the field. Having attended factory schools, conferred with the salesman whose territory he is handling and participated in sales meetings, a relief man is schooled in product knowledge and in the presentation of this knowledge to a customer.

He is assisted greatly by talking his story on a storage battery or piston ring to an invisible customer over a voice-recording machine for one minute. At a sales meeting the record of his private sales talk to a prospect is played back for all to hear in his presence, so that with criticism and praise he can build up his story. Listening to his own voice with objectivity gives him perspective on what his actual performance sounds like, and helps him polish and perfect his style.

As he listens to the recordings of other salesmen, he discovers good points that he can apply in his own contact with customers.

Valley Distributors has recently embarked on an intensified educational program for its salesmen on how the retail business is conducted and how its problems are met. Inventories in the garage, repair shop and gasoline station, methods of recordkeeping, buying, sales promotion, credit and collection are brought to the attention and study of the salesmen so that help and instruction can be given its accounts.

"We are eager to make better business people of our customers. We believe it will reflect in a more satisfying and profitable operation for them, as well as give our own salesmen a better understanding of the position of the retailer. We should both benefit materially from the program," commented Staples.

K-D Opens Atlanta Warehouse

K-D Lamp Co. of Cincinnati, O., has opened a warehouse at 95 Pine St., N. E., Atlanta 3, Ga. The company is represented in the territory served by this warehouse by Paul Oxley, whose headquarters is at Macon, Ga., and Earl Potter, whose headquarters is at Memphis, Tenn.

Max Hayes' Mother Dies

Mrs. Laura Hayes, mother of Max A. Hayes of Hayes & Hopson, Inc., Asheville, N. C., a past president of the Southeast Automotive Show, died Oct. 16, the day before she would have been 85 years old. She had been in declining health.

"We have added the **Gates Rubber Co.** line," reported **John W. Pribble**, vice-president of **Lamb Automotive Supply Co.**, Salina, Kan.

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Appointment of E. C. "Pete" Howell as district manager for Maremont Automotive Products' North and South Carolina territory has been announced by Charles A. Klaus, vice-president in charge of sales. Prior to his present appointment, Howell was district manager for World Bestos Corp. for eight years.

J. Cardon Meshaw, vice-president of the Lumberton store, is transmitting an order directly to the warehouse in Wilmington. Saves time!

Teletypewriter System Is Saving Time And Aiding North Carolinian's Sales

FEWER sales are being lost, labor is being saved and order records are being kept more accurately as the result of the teletypewriter system which has been inaugurated between branches, headquarters store and warehouse of MacMillan & Cameron Co., Wilmington, N. C.

Costing about $400 a month and affording direct connection at all hours of every day between the units at New Bern, Jacksonville and Lumberton with the main office and warehouse, the system has permitted "better contact between the branches for better inventory control and helps keep down the losses of sales which might otherwise result where there might be much delay in getting merchandise to the branches," commented J. Allen Lewis, general manager of the wholesale division.

This system, leased through Southern Bell Telephone and Telegraph Co., has proven cheaper than the former use of long distance phone calls, he said. In addition, a printed record is available for all parties concerned and the communication can be ripped off the machine and the order filled directly from that sheet, minimizing labor costs.

"We have already sold several pieces of equipment because of our new system which we probably would not have otherwise," the general manager said. "Our teletypewriter system is the only one in the automotive jobber business in North Carolina and, to the best of my knowledge, east of the Missippi River."

This is cheaper than a constantly open, direct telephone line, which Lewis said would cost $4 a mile per month. Distances from the Wilmington headquarters to branches are: to Jacksonville, 50 miles; to New Bern, 90, and to Lumberton, 72.

Alabama Firm Moves Ptomey

Harlin Ptomey has been transferred by Motor Service & Supply, Andalusia, Ala., as manager of its Selma branch, Day Motor Supply, Truman Southwell, partner, announced.

At left: Headquarters of the veteran wholesale firm in Wilmington, which is tied in with the branches as well as the warehouse in Wilmington by the teletypewriter system. At left below is the Jacksonville store and below is the New Bern unit.

Officers, directors and staff members of AWOT pose after their pre-convention business meeting.

Texas Convention Pulls a Record 501 For Probable New Attendance Marker

RECORD registrations by 501 individuals—wholesalers, wives and factory men — for the annual convention of the Automotive Wholesalers of Texas in Dallas, Oct. 25 and 26 are believed to have set an all-time high in attendance for this or any other state association of its kind.

This figure was not an estimate, but an actual count of registration cards signed by those attracted by the two half-day business sessions and two half days of booth conferences, with 79 manufacturers having booth space.

A majority of those attending sat in on the business sessions, where they learned that the association will soon launch its automatic transmission mechanics-training program and that the committee of Senator Joseph O'Mahoney (D-Wyo.) will devote more of its future investigations to the parts business. In the concluding business session, wholesalers voted down by a ratio of 3 to 1, a resolution that called for association activity in proposed state licensing of automobile mechanics.

Just four weeks earlier the Independent Garage Owners of Texas, meeting in Fort Worth, had adopted an even stronger resolution on the licensing proposal.

The automatic transmission program was first publicly introduced through a panel discussion featuring four of five members of the association advisory committee on this activity, James R. D. Eddy, dean of the Division of Extension of the University of Texas, and G. E. Williams, association field representative.

One panelist, Joe L. Ward, Waco wholesaler, told the audience he wished the idea were original, but conceded it was a carbon copy of the highly-successful transmission school conducted by the Automotive Wholesalers of Oklahoma. The Texas program will cost $10,000 for the first year, Dean Eddy said, and less thereafter. Of this, $7,500 will be defrayed by the university, $1,000 will be supplied by AWOT, and the balance will come from sponsoring fees charged participating wholesalers. It is expected the first classes can begin about Feb. 1.

Principal speaker from within the industry was Robert E. Phelps, Washington, D. C., wholesaler, with the subject, "What Can the Automotive Industry Expect from Washington?" He concluded the industry can "expect a lot if we go in with a clear and concise story and stick together on it."

The defeated mechanic-licensing resolution merely proposed that the association "investigate the practicability." All others passed, including proposals requesting: Advancing Texas highway patrolmen's pay from $304 to $400 a month; a U. S. Bureau of Standards specification on brake fluid, such a standard to become law in Texas and avowed participation in the Southwest Automotive Show by national associations.

(More Jobber News on page 150)

AWOT officers are (l. to r.): Seated, Wilton Jennings of Austin, treasurer; J. M. Vesmirovsky of Houston, president; T. C. Watkins of Midland, first vice-president; Fred D. Pinkston of Lubbock, second vice-president; standing, G. C. Morris of Austin, executive director; Kindel Paulk of Wichita Falls, retiring president; G. E. Williams, field representative. C. H. Callahan of San Antonio, secretary, was not present. New directors are Leon Hodges, Carl Garner, Harold Bean, Ray Hertenberger, Jack McMeans, Ward W. Worthy, Tom Davis, William Woehler, Clyde White, Robert Flato, Harold Yeary, Tom Clark, O. D. Reed, William Tole and G. L. Mayfield.

SERVICE *and* MAINTENANCE

To Drive They Must See!

Wiper and Washer

By E. M. Lowery
Technical Editor

"WITHOUT vision people are lost." So goes a saying we have heard somewhere. The accident toll on our highways certainly proves this. Far too many accidents are caused by lack of proper vision.

We run all types of safety specials, most of which include headlight service. They must produce the specified C. P. and be focused properly. But what good are the best of headlights if the operator's vision is obscured by the windshield?

In watching the embarrassment of several "top-flight" mechanics trying to perform a little windshield wiper service, we suddenly realized that most shops might be seriously lacking in windshield wiper and washer knowhow.

CORROSION . . . WEAR

Fig. 1—Test hinge action.

How to make a wiper arm and blade inspection:

1.—Test hinge action (Fig 1):

Pressure is transmitted to the wiper blade through the arm hinge. Hinge action must be free of binds and apply firm pressure at the arm end.

Check for corrosion or wear at the hinge point.

2.—Check for distortion (Fig. 2):

. . . TWIST . . . BEND

Fig. 2—Check for distortion.

Rough handling can cause twist or bend in the wiper arm of blade connector. Arm distortion will not allow the blade to follow the contour of the shield properly.

. . . WEAR . . . AGE

Fig. 3—Inspect wiping edge.

3.—Inspect blade wiping edge (Fig. 3):

The sharp wiping edge of a blade wears off much the same as a tire becomes bald. A rounded, worn wiping edge cannot remove film or smear from the windshield.

4.—Check connectors (Fig. 4):

Worn arm connectors or complex built-up adaptors cause excessive layover of the blade. This results in a poor wipe because the blade is not held at the proper angle for best cleaning action.

. . . WEAR POOR ADAPTORS

Fig. 4—Check connectors.

5.—Operate wipers (Fig. 5):

Start washers, if car is so equipped; if not, wet windshield. Wipers should never be operated on a dry windshield. The wipers should travel evenly and reverse smoothly. Check for cleaning action.

Wiper arm and blade installation:

1. — Wiper blade installation (curved shields):

Use rainbow blades. See Fig. 6.

2.—Flat shields:

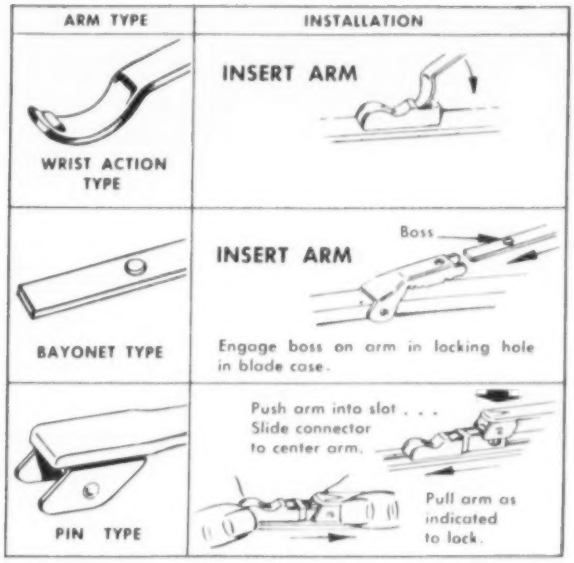
Use triple-action blades. See Fig. 7.

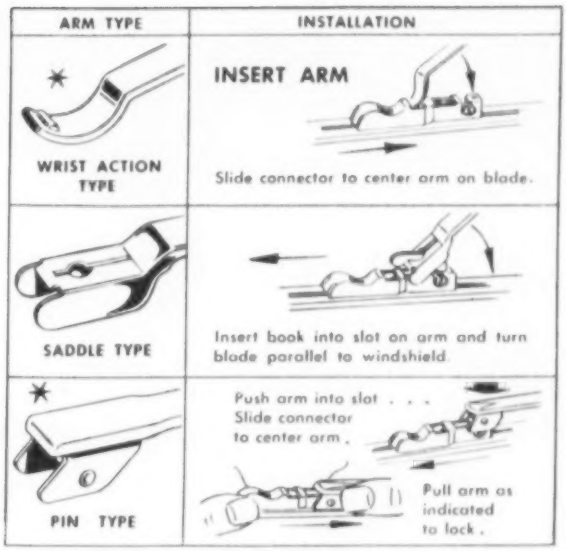
Wiper arm installation:

Fig. 5—Operate wipers—wet.

SMEAR STREAK CHATTER

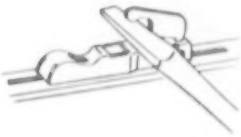
Illustrations and technical data courtesy of Trico Products Corp., Buffalo, N. Y.





Above: Fig. 6—Blade installation (rainbow blade on curved shield).
Right: Fig. 7—Blade installation (triple-action blade on flat shield).

✶ For wrist-action and pin type arm installation on TAU blades remove clip as illustrated. Use screw driver or flat section of wiper arm, do not use pliers.



Turn wiper on, then off, to position wiper shaft in park position. Install arm at desired parking angle. Spring lock in arm head must snap behind driver.

1.—Knurled shaft:

No adaptors required. Just press arm or shaft. Equipment on most cars since 1941.

Fig. 8—Synchronized wiper operation: Heavy-duty motor used with gear, chain or pivot linkages.

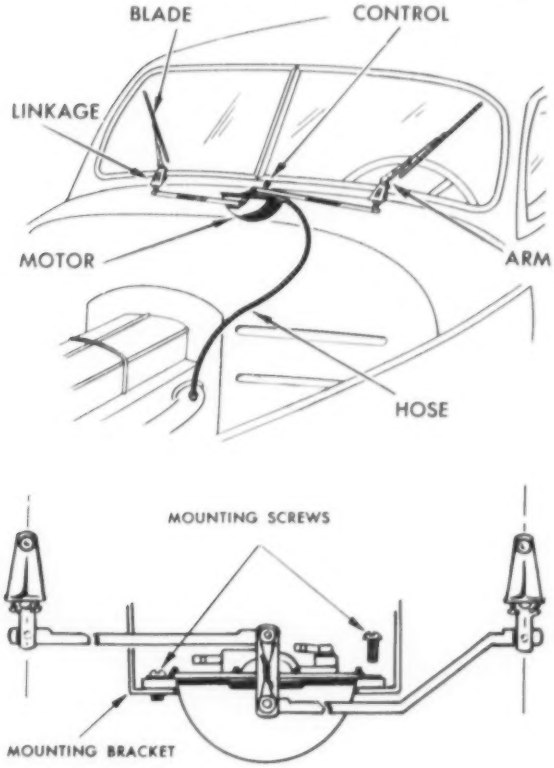
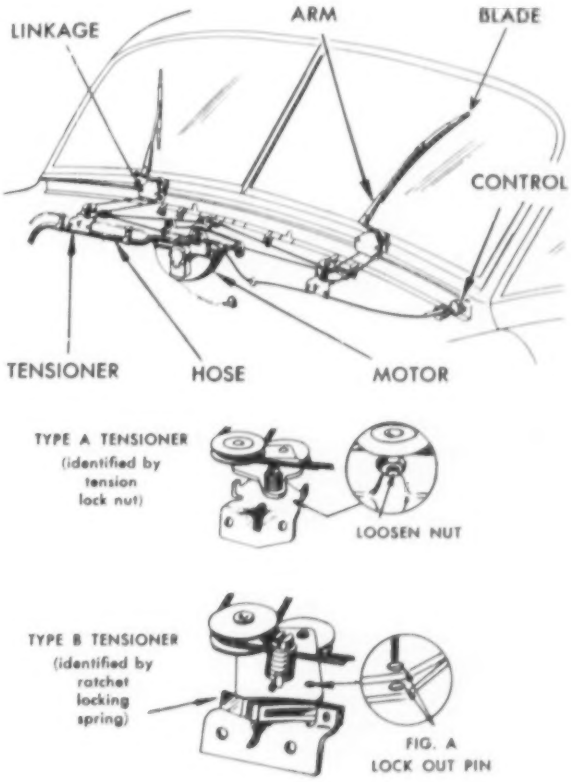


Fig. 9—Heavy-duty motor used with cable-driven linkages.



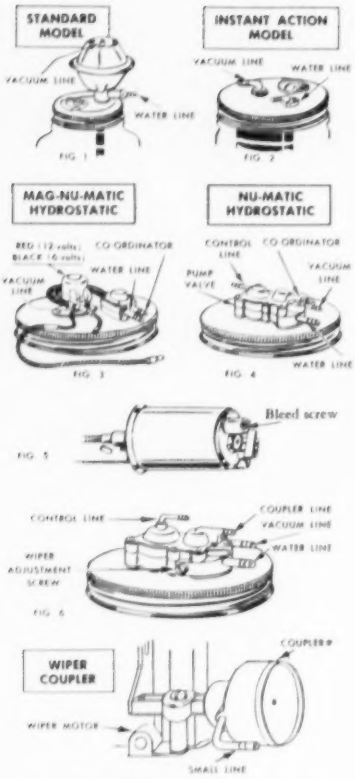


Fig. 10—How to check washers.

2.—Threaded shaft:

Convert to knurled type with adaptor end lock nut.

3.—Grooved shaft:

Convert to knurled type with adaptor and pin.

4.—Adjustable blade angle:

Swivel at blade connector permits setting blade at correct angle for each windshield.

Synchronized wiper operation —heavy-duty motor used with gear, chain or pivot linkages:

See Fig. 8.

Installation procedure.

1.—Install linkages and tighten attachment screws.

2.—Reinstall motor but do not tighten screws.

3.—Attach linkages to motor.

4.—*Important*: To obtain correct alignment, follow this procedure:

With linkage arms connected to wiper motor, set the linkage drive levers in a vertical position (see illustration); then tighten the motor mounting screws; start the car engine; turn wiper off, and permit the wiper to automatically assume the parked position before installing wiper arms.

5.—With wiper motor off, install arms and blades in parked position.

Heavy-duty motor used with cable-driven linkages:

December: Studebaker's Supercharger

Souped-up sources of power are becoming more and more in evidence on new models. Next month Technical Editor Lowery takes apart the new Studebaker supercharger for you.

See Fig. 9.

For proper adjustment of type "A" tensioner, loosen nut and tap stud lightly to unseat lock washer. This permits the cable tensioner to automatically take up any slack in the cables.

Retighten the nut firmly to hold the pulleys in the new position.

Each tensioner must be adjusted separately.

Check to see that cable runs in center of pulley groove.

Type "B" tensioner provides for automatic take-up of any slack in the cables. No adjustment required. To remove or reinstall cables, release ratchet locking spring from ratchet teeth with finger pressure and manually move tensioner toward center of car to relieve pressure on cables.

New ratchet-type tensioners as supplied by factory are assembled with a lock-out pin (Fig. A) which must be removed after tensioner is installed to permit automatic take-up of cables.

After installing tensioner, check to see that cable runs in center of pulley groove.

Heavy-duty motor used with cable-driven linkages having built-in torsion spring take-up:

Built-in torsion spring take-up permits simplified cable tension adjustment.

Cable adjustment procedure:

Wiper slap or over travel at end of stroke, or short stroke indicates cables are too loose.

(Continued on page 84)

Wiper maintenance service.

(1) Wiper Runs 1 WAY ONLY

with Engine Running – Check —

A. Sticky, broken or worn valve parts in motor.

B. Worn piston in wiper motor . . .

RECOMMENDED SERVICE

A — Clean valve mechanism and valve facing. Replace broken or worn parts.

B — Replace with NEW wiper motor. A NEW motor costs little more than a repair job.

(2) Wiper Runs SLOW

. . . with Engine Running – Check —

A. Restricted or leaking vacuum lines or manifold connection plugged with carbon.

B. Broken diaphragm in vacuum pump.

To check, remove vacuum line and test for vacuum supply.

RECOMMENDED SERVICE

A. Install NEW vacuum lines.

B. Repair or replace vacuum pump.

(3) Wiper SQUEAKS

. . . with Engine Running – Check —

A. Dry felts on wiper motor shaft stud at point of connection for linkage.

B. Dry linkage shaft bearing.

• LINKAGE LUBRICATION

Use light penetrating oil on all parts indicated by arrows. Squeaks in linkage operation can be eliminated by proper lubrication at all points specified.

(4) Wiper Won't START

. . . with Engine Running – Check —

A. No vacuum at wiper motor.

B. Broken valve parts in wiper motor.

RECOMMENDED SERVICE

A. Check vacuum line to manifold . . . replace sections broken, kinked or porous.

B. Clean valve mechanism replace broken parts.

Don't Always Blame the Plug!

Some simple precautions cited by this authority can save your time and produce ignition-job profits.

By GEORGE M. GALSTER
Service Manager, Champion Spark Plug Co.
Toledo, Ohio

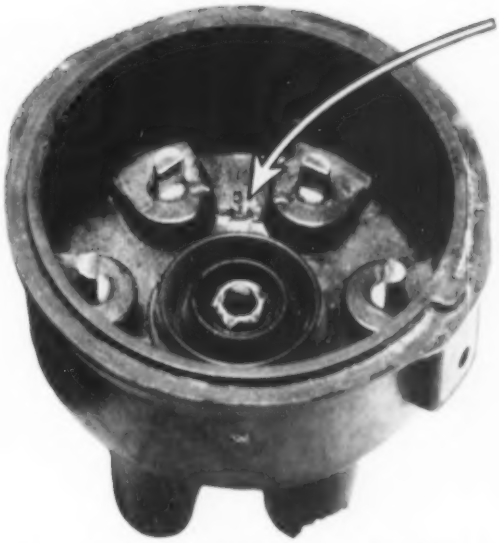


Fig. 1—Typical example of a distributor problem. Arrow shows the "track" created by a short circuit.

PROBABLY because it is the most advertised of any single engine component, the spark plug is possibly the most blamed for any engine malfunction.

Mr. Motorist, conscious that his car isn't operating properly and unaware of all the intricacies under the hood, is likely to lay the fault to the item most familiar to him—the spark plug.

This, I hasten to add, is not an indictment of advertising. We want the motorist to be familiar with spark plugs and advertising is the best way to accomplish this.

Moreover, the spark plug, like a small boy who is always in mischief, seems like a logical culprit. That's because simply changing the spark plugs in a rough-running or misfiring engine, without making any other repair or adjustment, very often will *temporarily* remedy the condition.

Sometimes, too, when the condition reappears after a short period, the spark plugs become "two-time losers." It's hard for Mr. Motorist to understand why, if spark plugs can cure the condition for the first 100 or so miles, they can't cure it permanently. Therefore, he reasons, this new set must have failed.

It's true that spark plugs become dirty and also wear out. Manufacturers for years have urged cleaning every 3,000 or 4,000 miles and replacement every 10,000 miles. Failure to follow this advice can—and will—result in less economy of operation and poorer performance. However, there are a number of things in the modern engine which can cause poor performance besides the spark plug. Some are obvious and some not so obvious.

George M. Galster has been service manager of Champion Spark Plug Co., since 1952, when the service division was established as a separate department. He directs a force of field service engineers and has the responsibility for all service problems in connection with automotive-type spark plugs. He also works closely with the company's research and engineering divisions in the design and development of spark plugs for various applications. He is a graduate of the University of Detroit with an engineering degree. He began work for Champion in the engineering division in 1947.

Here are a few that have come to our attention lately:

In some distributors, the wire connecting the distributor terminal to the breaker points becomes loose where it is soldered or welded to the connecting clip. The wire carries only six or 12 volts, depending on the ignition system, and this loose connection can cause an intermittent misfiring which is frequently blamed on the spark plugs, particularly because the bad connection is not readily noticed. It may look all right, and may check okay on a resistance test, but a slight pull on the wire may loosen it.

And, speaking of distributors, this problem isn't a new one by any means, but it crops up every winter—hard starting because of the wearing down of the carbon button center contact inside the distributor cap. This wear, usually after some 20,000 or 30,000 miles, may cause the high voltage to jump the gap between this contact and the metal finger of the rotor, building up corrosion and high resistance. Badly burned distributor cap towers and inserts will cause the same thing (Fig. 1). So, hard starting can be due to the plugs not receiving sufficient voltage to spark.

Under severe driving conditions, the heat developed under the spark plug cover plates on Buick engines will tend to harden and crack the rubber spark plug "boots." As a result, external shorting may occur and the misfiring won't be stopped by new spark plugs—unless inexpensive new boots are added, too.

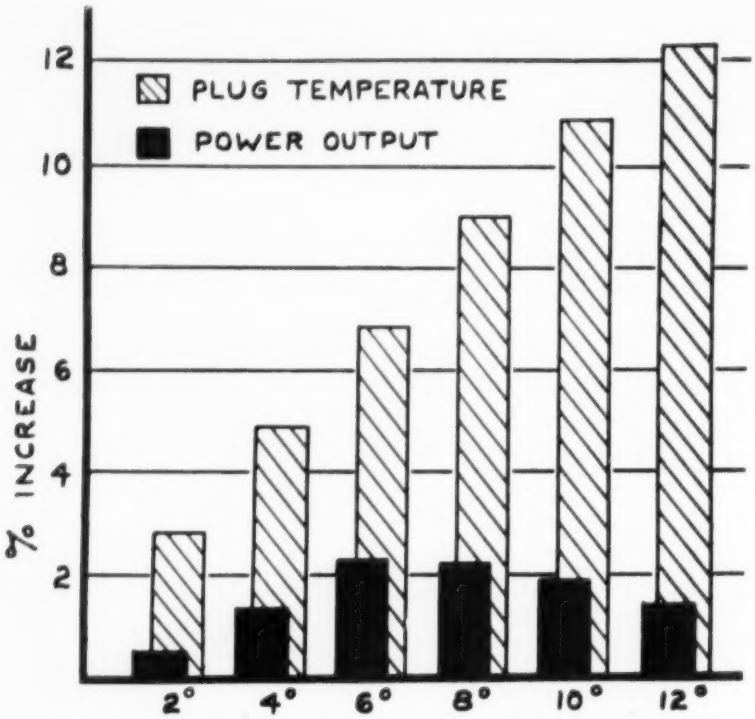


Fig. 2—Over-advanced ignition timing can greatly increase plug temperature—more than 10% with only a few degrees' over-advance

Over-advanced ignition timing can result in detonation, but that's not all. It can also greatly increase spark plug and valve temperatures—by as much as 8% to 10% (Fig. 2). And, an increase of only 50° to 100° F. during severe service can put spark plugs in the critical temperature range. So, in cases of excessive electrode erosion, don't always reach for a colder plug or "cuss" the manufacturer. Check the timing.

Incidentally, it's good policy to check distributor vacuum advance units to see that additional spark advance is being supplied during part-throttle operation. In some 1956 V-8's, for example, the vacuum line at the carburetor is located in such a way that fuel sometimes is able to enter the vacuum advance unit. When this happens, the diaphragm eventually becomes porous and the unit doesn't operate. A simple way to check this is to use a timing light with the engine running at about 800 rpm and then see if disconnecting the vacuum line has any effect on ignition timing.

In the new higher compression engines, many mechanics have been baffled by this mystery: a spark plug misfires, although by every test it is in good condition. A new spark plug corrects the condition—for a few miles—and then the misfire is back. The answer is likely induction loss. Whenever two high-tension conductors are parallel to each other and close together, the magnetic field surrounding one will induce current in the other. This is not a matter of the quality of the insulation, but an electrical phenomenon.

Take recent model Cadillac V-8's. The last two spark plugs in the left bank of cylinders fire consecutively and the two cable leads have a tendency to induce voltage in each other. When one spark plug fires, its cable can induce sufficient voltage in the adjacent wire to cause it to fire the next plug. This kind of erratic firing can produce a very rough engine. Cadillac has relieved the condition by locating the leads as widely as possible, using a criss-cross pattern in the mounting bracket (Fig. 3). Watch this pattern when installing new spark

Fig. 3—On recent-model Cadillacs, cable leads are mounted in a criss-cross pattern to avoid induction loss. Failure to replace the leads in the correct order will result in a rough engine.

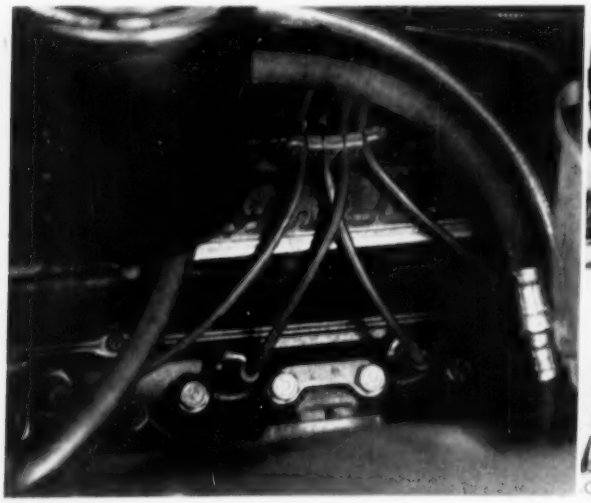
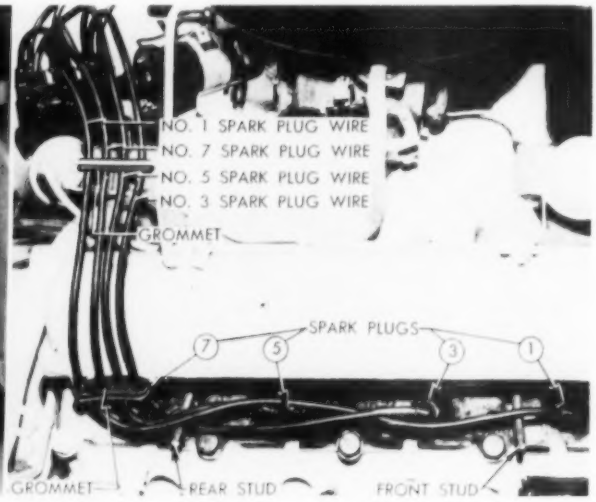


Fig. 4—Similarly, your failure to follow the correct wiring pattern in the Buick V-8 models where the cables are under a metal cover plate can result in a baffling misfire.



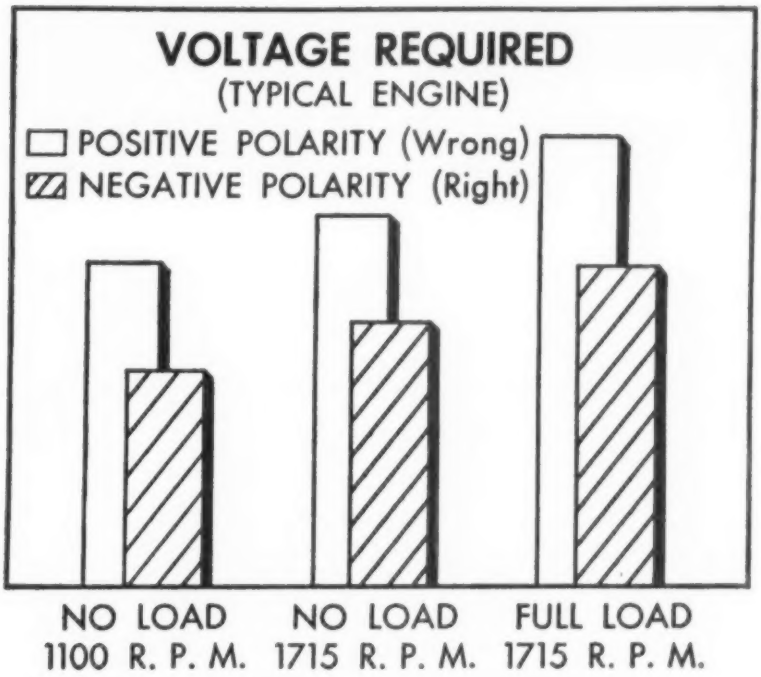


Fig. 5—The wrong polarity can increase the voltage required to fire the plugs as much as 35 to 45% under all operating conditions.

plugs to be sure the leads are replaced in the correct firing order.

A similar example of possible induced leakage or "cross fire" can be found in Buick V-8 models where the spark plug cables have a metal cover plate. Failure to follow the recommended pattern for mounting the leads, especially on the right engine bank, can result in a baffling misfire that new spark plugs may correct—for the first 200 miles or so (Fig. 4).

Suppressor-type ignition cable can sometimes encourage misfiring and rough idle, apparently because the resistance wiring reduces the energy of the spark sufficiently to cause misfiring when cylinder conditions are marginal. On certain Pontiac and Chevrolet V-8's, for instance, where there have been complaints about "fouled" spark plugs after 2,000 or 3,000 miles, installing plugs with standard-type wiring provides completely trouble-free performance. When secondary circuit resistance is removed, it's also a good idea to replace the aluminum segment distributor caps with those having brass inserts.

Car start hard, have a rough idle? Is there misfiring during acceleration and at high speed? Wait a minute. There's another reason why it may not be spark plugs.

The research division at Champion has recently come up with some interesting information on coil polarity which shows that when polarity is wrong, the voltage required to fire spark plugs may increase from 35% to 45%. And this occurs under all conditions (Fig. 5).

The direction of the high-tension current flow at the spark plug terminal should be negative. If it isn't, either the battery has been improperly connected or, more likely, the primary leads at the coil have been reversed.

How often does wrong polarity occur? Nobody knows for sure, but it is an educated guess that 10% of the cars on the road are wired wrong and 20% to 25% of the trucks, tractors and industrial engines have this unsuspected cause of "plug trouble." It can't always be blamed on the mechanic installing a replacement coil, either. A good many units have been wired improperly at the factory and occasionally a coil itself may have the wrong terminal markings.

Again, a well-known manufacturer has two coils very similar in appearance except for primary connections being on the opposite side. When these coils are interchanged and the mechanic is careful to replace the wires in the same manner that he removed them, he inadvertently hooks up the wrong polarity.

Polarity can be checked with a high-tension voltmeter or with most coil testers. When the positive lead is grounded and the other lead touched momentarily to the spark plug terminal, the needle will swing upscale if the polarity is negative (correct). If the needle moves downscale, the coil leads should be reversed.

Another method of testing is to hold the ignition wire about ¼" away from the spark plug terminal and then insert a pencil lead between the plug and the cable terminal (Fig. 6). (We suggest a wood pencil!) If the spark feathers and has a slight orange tinge on the plug side of the pencil, polarity is correct. If the spark flares or feathers on the cable side, coil wires should be reversed.

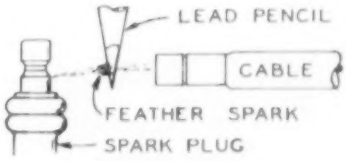


Fig. 6—One method of testing for polarity. Spark feathering on left of pencil lead indicates polarity is correct. If spark flared or feathered on cable side of pencil lead, you would know then that coil wires should be reversed.

Where coil terminals are marked plus or minus, the minus (—) terminal should be connected to the distributor in a negative ground battery system. The plus (+) terminal should be connected to the distributor in a positive ground battery system.

A spark plug is a pretty tough little customer. It sparks millions of times in a lifetime and withstands without complaint some quick extremes in temperature. But though its rugged constitution can stand plenty of abuse, I hope that by pointing out some other reasons for engine malfunctions, I have helped relieve it of some false accusations.

AC Offers New Filter

A gasoline filter that takes even the tiniest dust and dirt particles out of fuel—particles 45 times smaller than the period at the end of this sentence—has been developed by the AC Spark Plug Division for the General Motors fuel injection system.

Cold Weather Doctoring

By E. M. Lowery
Technical Editor

THERE are many dollars in shop labor and parts to be had only for the asking in seasonal body maintenance.

Sealing against water is more important than ever at this time of year. Wet upholstery and floor mats are most uncomfortable in cold weather.

After a thorough cleaning, the finish should be protected by polish or some other recommended material.

We promote all types of seasonal specials, such as complete lubrication, engine tune-up, cooling system service, etc., but we usually overlook body maintenance.

We'll spend lots of the customer's dollars installing new radiator and heater hose, adding the correct amount of anti-freeze, flushing the cooling system, making sure the heater operates as it should so the occupants will be comfortable. On the other hand, we pay no attention to doors that do not fit properly and weather-stripping that is torn or worn out, all of which lets the warm air out and the cold air in.

One of our biggest "headaches" is keeping out body rattles and squeaks. So we should offer a thorough tightening job. In eliminating rattles, we may discover and correct minor adjustment troubles which, if neglected, could lead to major ailments.

Cleaning and care of the exterior surfaces, chrome parts and interior trim will prevent deterioration and preserve the appearance of these parts.

All manufacturers have main-

tenance procedures which should be followed whenever possible. The following, however, will serve in most cases for general body care.

Eliminating rattles:

Most rattles are caused by a loose bolt or screw. Foreign objects, such as nuts, bolts, or small pieces of body deadener in the door wells, pillars and quarter panels, are often the source of rattles. Door wells can be checked by carefully striking the underside of the door with a rubber mallet. The impact made by the mallet will indicate if loose objects are in the door well.

All bolts and screws should be tightened immediately after the first 1,000 miles of vehicle operation. Regular body bolt inspection and tightening should be performed during all the years of usage. In the event tightening the bolts and screws, located on such assemblies as the doors, hood and deck lid, does eliminate the rattles, the trouble is probably caused by misalignment. If this is the case, follow the adjustment and alignment procedures for these assemblies.

Rattles and squeaks are sometimes caused by weatherstripping and anti-squeak material that has slipped out of position. Apply additional cement, or other adhesive, and install the material in the proper location to eliminate this difficulty.

Exterior cleaning:

The outside finish should be frequently washed. Never wipe the painted surfaces with a dry cloth. Dusting the finish when it is dry tends to rub the dust and dirt into the baked enamel and leaves a sandpaper effect on the surface.

To keep the finish bright and attractive, and eliminate the necessity of using polish, wash the vehicle whenever it has accumulated an excessive amount of dirt and road salt. If the finish does become dull and unattractive, it may be restored to original brilliancy by applying cleaners and/or polishes.

Care of chrome-plated parts:

The chrome-plated parts of the car deserve special care. Extra precautions and periodic cleaning will preserve the beauty and life of these finishes.

Wash only with mild soaps or detergents. Using a clean soft cloth or a sponge and water, rinse and wipe the parts dry. Chrome cleaning compounds may be used sparingly for the removal of rust. Do not scour finish parts with steel wool or polish them with products containing abrasives. Chrome protector will provide excellent protection for all bright metal parts.

Spots where metal shows should be repaired and repainted to prevent rust.

Care of convertible top fabric:

Proper care of the top material will reduce the possibility of water stains, mildew, or shrinkage. Do not fold the top if it is damp or soaked. Always use the convertible top boot to keep the top material clean and dry when the top is in the fully lowered position.

Be sure the owner uses the top compartment behind the rear seat back only for storage of the top. Storage of other items, such as a car jack, golf clubs, luggage, or other miscellaneous objects, not only interferes with the proper operation of the top, but may also damage or strain the top material.

Top material that has become faded should be treated with a top dye (except plastic-coated material). Top dye not only restores the original color of the top, but it also preserves the material and acts as a sealer for good measure.

1.—Washing top fabric:

The top material should be cleaned and washed at least twice every three months to prevent fine particles of dust and grit from becoming embedded in the fabric. Removal of such dirt particles would require hard scrubbing and a stronger soap solution which could damage the surface of the fabric.

Before washing the fabric, remove all loose dirt with a brush or a small portable vacuum cleaner.

Mix one part of a recommended foam cleaner with two parts of water. Cover the bottom of a suitable container with diluted foam cleaner. Soak up the liquid with a clean sea-wool sponge (about the size of a fist). Add more liquid if necessary to completely saturate the sponge. Alternately squeeze and release the sponge until all the liquid has been transformed into foam.

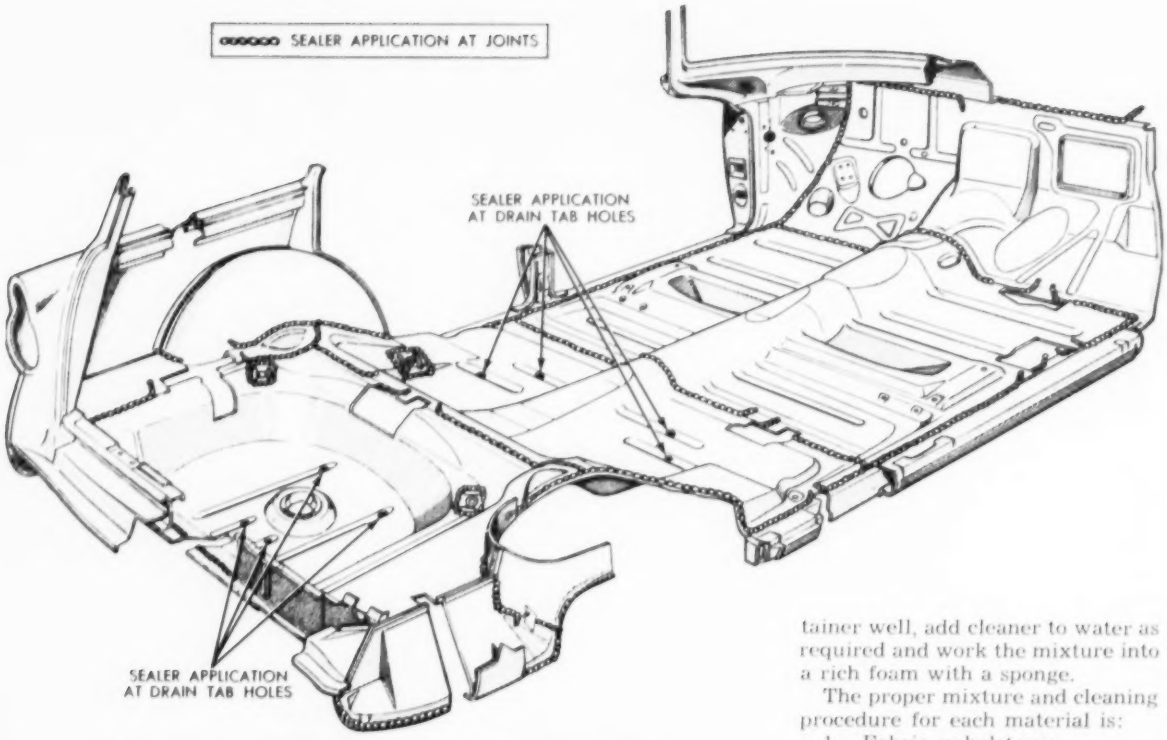
Apply foam to the fabric with the sponge or a soft brush. Rub in a circular motion and finally in the direction of the nap of the material. Never saturate the fabric with liquid. Occasionally dip the dirty sponge in a separate pan of clean water and squeeze it dry before applying more foam.

Thoroughly clean the sponge (or use a second sponge), then squeeze the water out of the sponge. Wipe off all emulsified dirt and excess foam from the top surface.

Remove excess moisture from the cleaned fabric with an absorbent cloth, allow the fabric to dry,

December: Body Shop Short Cuts

Who wouldn't be interested in Ed Lowery's topic for next month: Short cuts in the body shop? Directing a big shop himself, he will tell how to save hours.



Typical pan construction, showing sealer application. These points may require resealing to prevent dust and water leaks.

then brush it.

2.—Application of top dye:

Top dye is available in various colors.

Before applying top dye, clean the loose dirt and film from the fabric with a brush or a vacuum cleaner. Wash the fabric lightly with a foam cleaner. Allow the top to dry thoroughly. Top dye may be applied with a good paint brush; however, a spray gun is recommended.

If using a brush, stir the dye thoroughly and, if necessary, thin the dye with enamel or lacquer thinner before brushing. For spraying, reduce the viscosity by adding one part enamel or lacquer thinner to two parts of top dye.

The body should be covered before spraying. Apply top dye in the same manner as applying paint to the body. One coat of top dye is usually sufficient. However, an additional coat may be added if the top is badly faded. If an additional coat is to be added, allow the top to dry for 15 to 20 minutes between coats.

Keep the car in direct sunlight, or in a warm dry place, for at least 12 hours after applying dye. Do not fold the top for at least two days.

If, through improper masking, some dye falls on the body, it should be wiped off immediately with a cloth soaked in the recommended solvent.

3.—Plastic-coated top:

If the plastic-coated top is not too badly soiled, clean the material with mild soap and lukewarm water. If the top becomes badly soiled, use a foam cleaner. Use a mixture of one part cleaner to two parts water on the badly soiled areas. The mixture may be varied, depending on the soiled condition of the material. Use a soft brush with the mixture. If foam cleaner will not remove spots, use a household abrasive cleaner.

Caution: The plastic coating used in this material becomes tacky at approximately 180°. When making paint repairs, be sure to protect the material from heat and paint thinners.

Interior cleaning:

A foam cleaner can be applied to any of the various materials used in the body interior. This cleaner is a concentrated solution and should be diluted with water in either one of two different mixtures, according to the material application. Mixture No. 1 consists of five parts water to one part cleaner; mixture No. 2 calls for two parts water to one part cleaner. Shake the container well, add cleaner to water as required and work the mixture into a rich foam with a sponge.

The proper mixture and cleaning procedure for each material is:

1.—Fabric upholstery:

Apply mixture No. 1 freely with a soft bristle brush. Use short, light strokes until the foam disappears. Wipe off the emulsified dirt with a turkish towel and allow the material to dry. When dry, brush the material in the direction of the nap.

2.—Leather, plastic and imitation leather:

Apply mixture No. 2 lightly with a brush and leave it on the material for two or three minutes. Make a second application and brush well. Remove the residue with a clean soft cloth.

3.—Seat covers:

Do not remove the covers from the seat. Freely apply mixture No. 2 with a brush to the entire seat or back rest. Repeat the application and wipe it off at once with a clean, soft cloth. Dry as soon as possible by direct sunlight or heat lamp.

4.—Carpet and floor mats:

Sweep or vacuum the carpet thoroughly. Freely apply mixture No. 2 with a brush until the foam disappears. Wipe with a damp sponge in the direction of the nap. When cleaning rubber mats, first apply the mixture freely with a brush and, if a second application is needed, scrub with a cloth or turkish towel.

5.—Headlining:

Apply mixture No. 1 with a nat-

(Continued on page 144)

AIR BRAKES

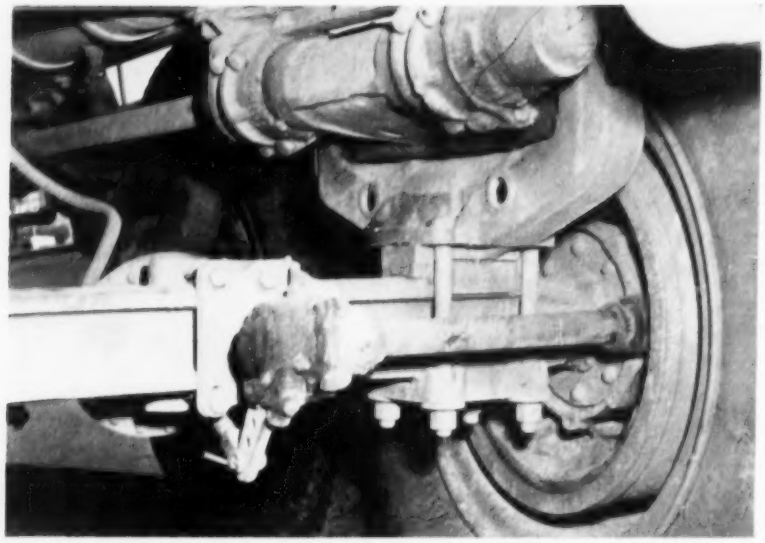
By E. S. Harris

THERE are occasionally some news items in the morning paper that are enough to make your hair stand on end.

How many times in the last few years have you seen stories about heavy truck rigs having a brake failure and becoming runaways down some long grade with many cars and possibly a town in their path?

It happens more times than you think, or than it should. When you number the times you have read about it in your local paper, you are usually counting the runaway incidents only in your own vicinity, for these accident items from other parts of the country rarely rate a spot in your local newspaper. And for every case of brake failure that rates a news story at all, there are several cases where the trouble occurred on a level roadway or in slow traffic where the driver was able to bring the vehicle to a safe stop without stirring up a news story.

Top: V. T. Henson of Albuquerque repeats the driver's inspection at the shop. He checks the brake hose and connections for condition and possible leakage.
Center: Brake leakdown and build-up tests can be made in cab. Note manual control for protection (or breakaway) valve below switch panel at right.
Right: Compressor unloading valve is adjusted to .010 min. to .015 max.



Drivers check trailer's slack adjuster as part of their routine road check.

And in case you don't know why trucks have so many brake failures, you only have to ask the inspectors who stop trucks on the highways and give them an official safety check. They'll tell you, they'll tell you it's poor maintenance.

Recently one of these official safety inspection crews took occasion to publicly compliment one cross-country fleet operator because they had stopped a large number of his rigs during the month, and although they had found any number of brake deficiencies on other trucks they'd inspected, they could not turn up a single brake item on any of the trucks in this fleet.

The operator accepted the praise with thanks, but said the laurels belonged in their service department where good maintenance was the order of the day, and that their service superintendent would certainly not consider allowing one of their heavy vehicles out in traffic without making certain the brakes were in good order.

Before returning to the methods used by this fleet shop to keep their brakes in such order that they rate an official bow, let's evaluate the service potential involved in the far greater number of trucks which *couldn't* pass a strict brake inspection. Any matter where maintenance and repair are involved is a matter of interest to the maintenance industry. Any black eye delivered to maintenance is shared by us all, whether we were involved or not. And business-wise, if maintenance shortcomings are so glaring and in considerable volume, isn't it business well worth going after?

As a matter of record, some of the trucks with poor brakes were serviced in fleet shops which apparently were not up to standard, but for the most part they were vehicles which were serviced in outside shops but only on the order of the truck owner. This would seem to pin the lily on the owner or driver or both, but it does leave a doubt. Did someone fall short on his *service selling*? Some mechanic who knew a repair or replacement was imminent, did he draw it to the attention of the operator?

And if he did bring it to his attention, did he put a little selling effort toward getting the job done? If he did, he was in the clear.

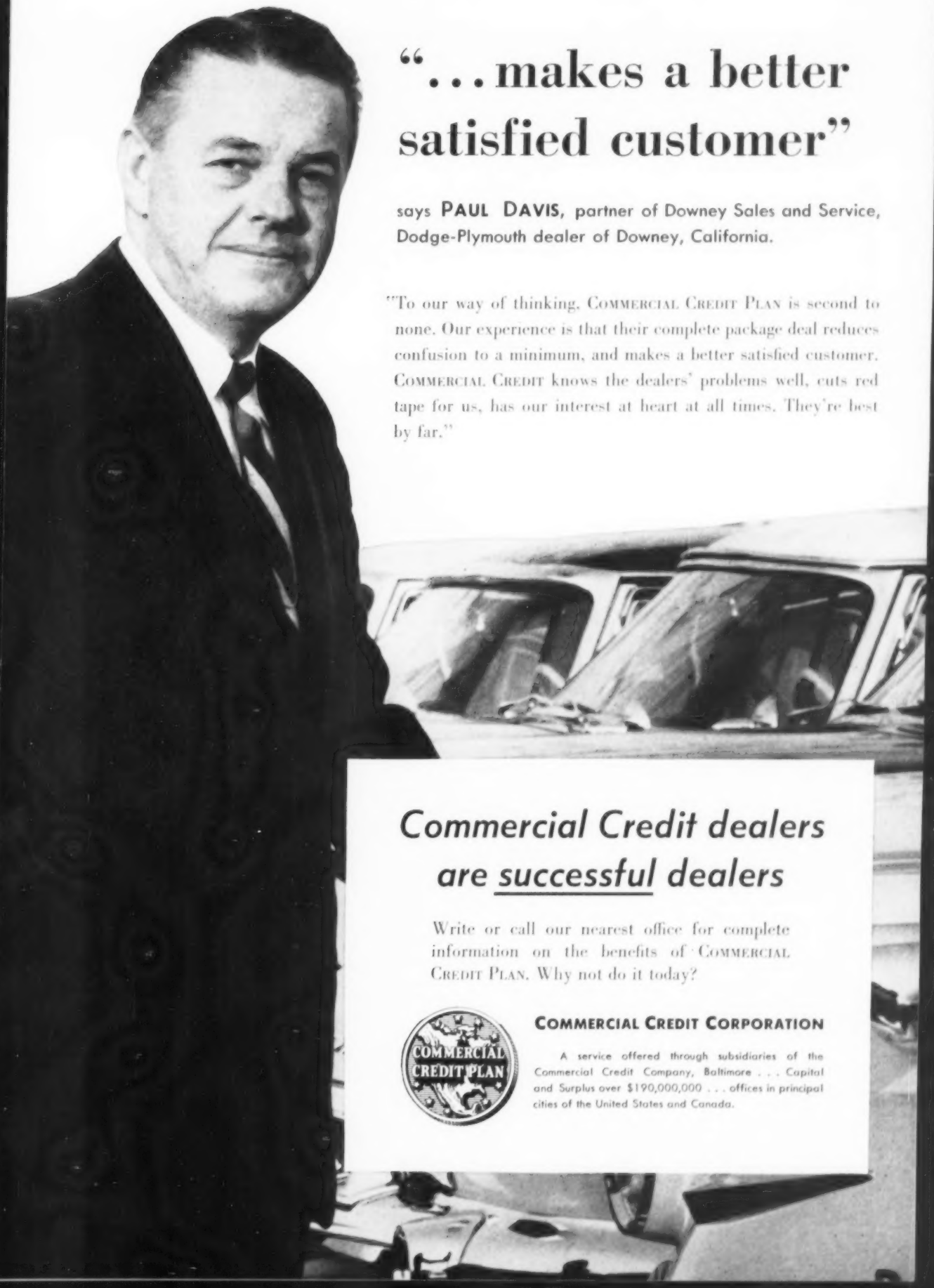
But he should remember that finding the trouble and mentioning it is only half his responsibility. Putting the necessary effort forward to get it done is the rest of the job. If this doesn't get it done, the responsibility only then rests on the owner.

Since most of the big jobs are equipped with air brakes, is that any reason why any good mechanic can't inspect and service them? Well, let's take a look at these systems and see.

First off, remember that the cause of these brake failures and runaways was laid at the door of poor maintenance, so "air brakes" and "failures" shouldn't be automatically mentioned in the same breath. Air brakes have been stopping trains for the last two or three generations and brake failures in that application are in such low percentages to almost be nil. But here again we have good maintenance and close inspections, so the moral is obvious.

Also consider that the air system is only the applying portion of the system, so brake shoes and linings are practically identical to passenger-car stuff, but for size. So any mechanic who slights this part

Mechanic R. L. Tyson of Albuquerque closely inspects brake shoes and lining at the 45,000-mile check.



"...makes a better satisfied customer"

says **PAUL DAVIS**, partner of Downey Sales and Service, Dodge-Plymouth dealer of Downey, California.

"To our way of thinking, COMMERCIAL CREDIT PLAN is second to none. Our experience is that their complete package deal reduces confusion to a minimum, and makes a better satisfied customer. COMMERCIAL CREDIT knows the dealers' problems well, cuts red tape for us, has our interest at heart at all times. They're best by far."

Commercial Credit dealers are successful dealers

Write or call our nearest office for complete information on the benefits of COMMERCIAL CREDIT PLAN. Why not do it today?

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COMMERCIAL CREDIT CORPORATION

A service offered through subsidiaries of the Commercial Credit Company, Baltimore . . . Capital and Surplus over $190,000,000 . . . offices in principal cities of the United States and Canada.

The drum is cleaned and closely examined for cracks, scores or other similar damage.

of the brake inspection is due for an inspection himself to see why he doesn't like money, for there is a relatively larger profit than in the case of passenger-car brakes.

In fact, the profit on all truck brake work is highly satisfactory and a nice gross charge of several hundred dollars is not unheard of when the work is of a general nature, and the owner doesn't fall in a faint when you tell him so, for it is a legitimate part of his operation expense. He is much more likely to ask "when" than "how much." "Down time" hurts them more than the repair bill in their businesses — a welcome change from the customer who has to decide between baby shoes and brake shoes when you inform him that his family budget is due for an upset.

Once the condition of the brake shoes, linings and their linkages is ascertained, the mechanic then wants to find if the air is produced in sufficient quantity, if it is contained in good order and if the control of the pressure is in order.

For an object lesson in brake maintenance we called on one of the several terminal maintenance shops of the Navajo Freight lines which operates over the Midwest, Southwest and western parts of these United States, and are holders of several awards for highway safety in national competitions.

We asked Tony Niccoli, the service superintendent at this Albuquerque terminal shop, how they maintained brakes in peak condition on the 96 diesel tractors that operate out of their terminal plus the hundreds of trailers which move in and out of the terminal—both their own and those of many other truck lines. (Cargo trailers are switched from line to line just as freight cars are on various railroads.)

Tony said, "Brakes are naturally an important part of all safety inspections, and since safety is to everybody's interest, we make brake inspections everybody's business."

He explained that he keeps in touch with the factory representatives for the vehicles and brake equipment to see if there are any innovations or changes or improvements which might affect their service, and follows the subject right on down through the service and repair lines to the drivers themselves, who are also an important link in the brake maintenance program, and are the men who must be satisfied with the brake operation before the vehicles can roll.

His shop foreman, V. T. Henson, volunteered to show us the various steps in brake maintenance they observed, and he was well qualified for the explanation, for he was a driver for the firm for several years before moving into maintenance.

Henson explained that while brakes are an "all-time thing" in a big truck operation like theirs, that there had to be a certain system or sequence for each inspection so that there could be no possibility for any of these services to be overlooked. They have a "trip" or driver inspection which each job gets before the rig rolls out of the terminal, plus occasional inspections along the road by the driver to see if there are any signs of brake misbehavior, overheating, etc. Being vitally and personally concerned with the safety of the vehicle on that particular trip, the driver checks his brake action and connections carefully and enters his observations on his trip report.

Of course any notation on the driver's report is transferred to a work order, and a repair job is executed on that item in the shop.

But the shop records on each vehicle call for certain routine inspections at given intervals at which time any deficiencies uncovered are immediately repaired. These inspections are made at 5,000- and 45,000-mile intervals, mileages that turn up more rapidly than you'd think on highway vehicles rolling day and night for several thousand miles on each trip.

The Once-Over at 5,000

At 5,000 miles a mechanic makes all the air system inspections made each trip by the driver, plus a few of his own. The compressor, storage tanks and lines are given a visual inspection and the standard leakdown test is made for possible excessive leakage during brake application. The mechanic sees that the system pressure is at 90 pounds, then applies the brakes and holds them on for one minute, and they should not leak down over 5 pounds.

The 45,000-mile brake check is made with wheels off so that shoes and linings and all operating parts can be cleaned, repaired, or replaced as the condition indicates.

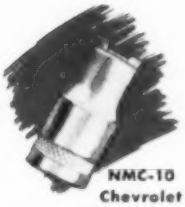
At this time the shop is busy installing tractor-trailer protection valves (or breakaway valves) on the vehicles not already so equipped. This is an emergency valve which holds the tractor's air in case of a line break and applies the trailer's brakes in case of a breakaway from the tractor. The unit is made to operate automatically, but it has a manual control lever at the instrument panel so the driver can operate it also.

The fundamentals of compressed air brakes are simple and with them in mind it is possible to check out a system in a short time. The compressor is driven by the engine to take free air and compress it to a pressure of around 100 psi and pass it through a line

(Continued on page 99)

Mechanics know how—

MODERN TOOLS MAKE MONEY!



NMC-10
Chevrolet
Distributor Socket

No doubt about it, you can't keep up with today's exacting automotive service and repairs without the modern Tools that put you in the ballgame. In fact, if you don't have the modern Tools that have been designed by New Britain to make your job easier and service better, you just don't make the bigger dollar in today's automotive repairs!

In addition to the scores of standard New Britain Sockets and Drive Parts that thousands of good mechanics have depended on for years, there are many new Tools, that can save time and trouble for you, and probably should be in YOUR Kit right now! Ask your Jobber about these modern New Britain Tools that make more money for mechanics!

Here— ARE JUST A FEW OF THE TOOLS THAT SHOULD BE MAKING MONEY FOR YOU *Right now!*

PLUS THIS GREAT NEW FAMILY OF AUTOMATIC TRANSMISSION TOOLS

N·A·P·A Assurance of Quality

New Britain HAND TOOLS

THE NEW BRITAIN MACHINE CO. • NEW BRITAIN, CONN.

Readers are invited to contribute to— SHOP TALK

A column of informal comments about the automotive trade and its problems.

THE EVER-POPULAR JOE

Joseph E. Bayne, a serious-sounding name for a guy so many franchised dealers know simply as "Joe Bayne," is still as popular as ever, and that's good, to say the least.

Now a member of Ford Motor Co.'s dealer policy board, as it came his turn last month at the nation-wide '57 Mercury showing at Miami, Fla., to take a bow, shouts mingled with heavy applause to send his introduction to the highest point of anyone who was introduced.

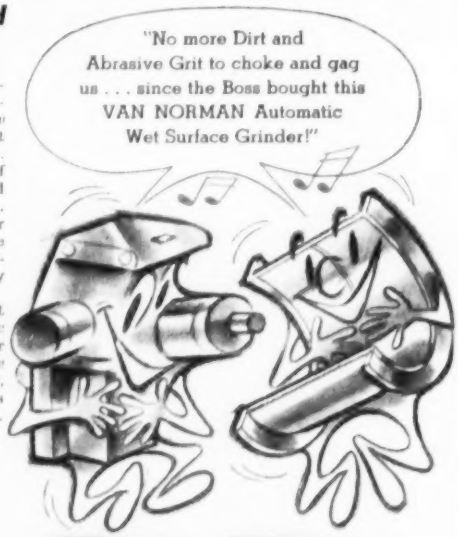
While many dealers have confessed that Bayne has demonstrated when necessary that he could shake a big stick, over the years that he's been sales chief of Plymouth, Chrysler and Lincoln-Mercury he has built up one of the most personal, friendly relationships with thousands of dealers of any industry executive.

NO MORE GRIPES!

from WATER PUMPS and MOTOR BEARINGS . . .

All parts and precision surfaces are protected by the exclusive Van Norman feature of placing the grinding wheel *below* the work. Dirty, abrasive-laden coolant does not pass *over* the work. This . . . plus the other Van Norman exclusive of loading table to give fastest set-up on all types of heads, manifolds and blocks . . . makes Van Norman the top money-maker on the most-asked-for job in the whole field of automotive service . . . cylinder-head reconditioning, scored 3 to 1 over any other job.

Surveys show more jobbers bought more head, block and manifold automatic wet grinders last year than any other equipment . . . *and that they bought more Van Norman machines than any other.* Write for special brochure on 4 models now available from 38" to 60" capacity. Van Norman Automotive Equipment Co. Springfield 7, Massachusetts.



The Best Equipped Shop is the Van Normanized Shop

A THREE-PRESIDENT CAR

A 1938 Cadillac convertible used to transport three presidents — Franklin D. Roosevelt, Harry S. Truman and Dwight D. Eisenhower—was recently purchased by Dr. Paul F. Wallace, an automobile hobbyist of St. Petersburg, Fla.

The nine-seat car, replaced by the White House with a later model, can attain a top speed of 115-mph. In 1952 it was rebuilt at a cost of $8,000.

Wallace, who plans to keep it as a museum piece, did not disclose the price he paid a Cadillac agency for it.

ENGINE HEATING DEVICE

Tuscumbia, Ala.

Dear Sirs:

I would like information as to where I could buy a heating device for keeping automobile engines warm over night, thereby making cold weather starting

Address any comments to: Southern Automotive Journal, 806 Peachtree St., N.E., Atlanta 8, Ga.

NEW FORMULA

REG. U.S. PAT. OFF.

SCOTCH

BRAND

MASKING TAPE

with the

Magic Touch!

PRODUCT OF **3M** RESEARCH

YOU ASKED FOR IT! A masking tape tailored to meet today's high-speed masking requirements. And here's your answer — *new formula* "SCOTCH" Brand Masking Tape with the exclusive MAGIC TOUCH. It goes on so easy . . . sticks so tight . . . comes off so clean.

USE NEW FORMULA "SCOTCH" Brand Masking Tape with the MAGIC TOUCH for all your repaint work. It's the *surest* way to turn out top-notch two-tone and all-over paint jobs! Order the rolls with the bright plaid cores from your 3M jobber. Better do it *today!*

Only "SCOTCH" Brand Masking Tape has the *Magic Touch!*

GOES ON SO EASY!

STICKS SO TIGHT!

COMES OFF SO CLEAN!

Only NEW FORMULA "SCOTCH" BRAND does all three!

The term "SCOTCH" is a registered trademark of Minnesota Mining and Manufacturing Company, St. Paul 6, Minn. Export Sales Office: 99 Park Ave., New York 16, N.Y. In Canada: P. O. Box 757, London, Ontario.

3M COMPANY

easier. If you have information on a device of this kind, please forward it to me.

DENNIS GRAY,
Morris Service Station

Happy to give you the names of several manufacturers.

BENSON'S ROOF LEAKS

Affable Mrs. Benson Ford was telling SAJ editors why she didn't make it to the convention of the Tennessee Automotive Association at Gatlinburg last month, where her husband, a Ford veep and chairman of Ford Motor Co.'s dealer policy board, spoke.

"The roof of our home at Palm Beach was leaking, and you know what that means I had to do," she reported. "I had to hurry on down there."

PHOTO FINISH

After someone made two attempts recently to break into his parts store, George Marshall of Miami, Fla., devised what he thought was a way to catch the thief.

Placing a small flash camera opposite the window where the break-in was attempted, he rigged up a trip cord so the intruder would take a picture of himself.

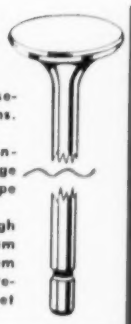
As expected, the burglar returned a third time and succeeded in opening the window. The only thing he took, however, was the camera worth about $10.

rmc -4 Way Leader

for heavy duty valve performance

TWO PIECE CONSTRUCTION

—a "must" for increased horsepower and higher compressions. rmc bi-metal valves feature: HEADS: of austenitic, non-magnetic, steel. Resists warpage and corrosion. Keeps its shape under extreme temperatures. STEMS: rmc specification high alloy steel. Provides maximum wear resistance at high stem temperatures. Hardened to prevent "riveting" from tappet impact.

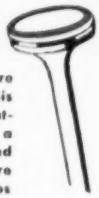


STELLITE FACES

rmc valves with Stellite faces are preferred for use in heavy-duty engines. They increase valve life from two to five times. They maintain better seating and compression under the hottest and toughest operating conditions—keeping horsepower up, fuel consumption down.

HEAT BANDS an rmc exclusive

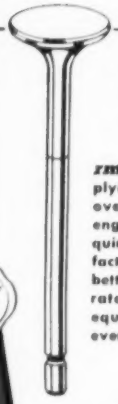
Some engines burn valves more readily than others. Combat this condition with rmc "heat-banded" valves. A band of a non-burning alloy fused around the outer edge of the head, where most burning takes place, helps prevent burning, increases valve mileage.



LOOK FOR THIS SEAL on every rmc heavy-duty valve box. It's your assurance of dependable "super-duty" performance under the toughest operating conditions.

ORIGINAL EQUIPMENT ENGINEERED

rmc, a basic manufacturer supplying original equipment for over a half century, knows the engineering and production requirements of the engine manufacturer. This assures you of a better manufacturing, more accurate tolerances and original equipment performance with every rmc valve.



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rmc COMPONENT PARTS

Guides

Springs

Valve Spring Inserts

Valve Seats

RICH MANUFACTURING Corporation
BATTLE CREEK MICH., U.S.A.
BASIC VALVE MANUFACTURER FOR ORIGINAL EQUIPMENT SINCE 1908

PHOTOSTAT? YES, INDEED

Tullahoma, Tenn.

Gentlemen:

We subscribe to your journal and one of our readers found the article on the Oak Ridge safety lane in the July issue contained information he could use in preparing a program for his luncheon club and wanted three copies, one for each member of his committee. May we have permission to make photostats for him?

G. E. RANDALL,
Manager,
Technical Information
Branch,
Aro, Inc.

Yes, sir, you bet.

HE WOULDN'T TRADE

Leroy J. Curtice, 68, who recently retired from General Motors' body shop in Lansing, Mich., on a monthly pension of $65 after almost 29 years, is an older brother of GM's President Harlow H. Curtice, whose yearly salary and bonus are above $700,000.

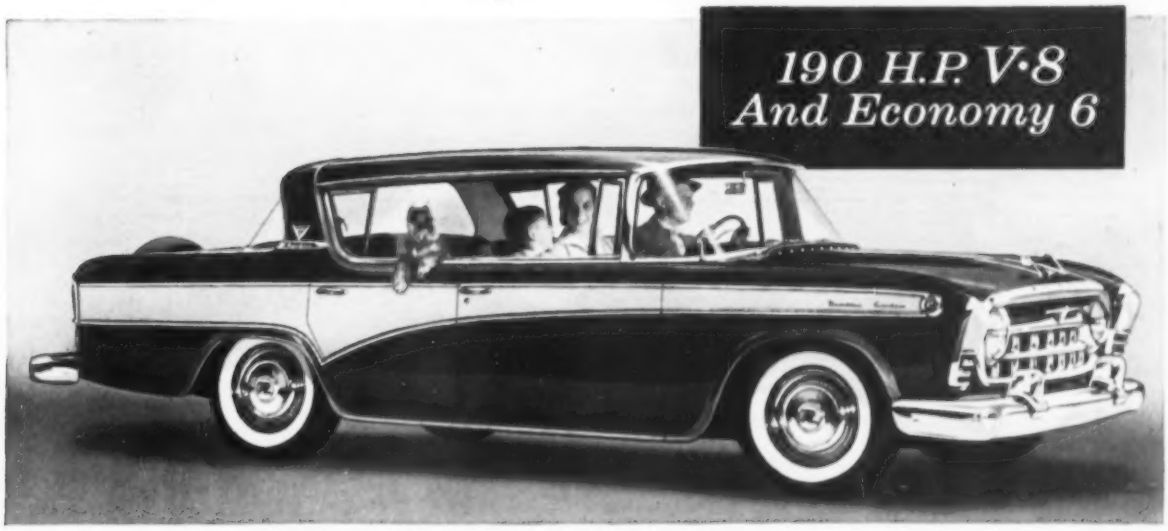
Leroy said he wouldn't like to trade places with his brother, the salary notwithstanding.

"I'd like to have his pay, of course," he said, "but working 24 hours a day like he does in his job is another story."

Izard of Hattiesburg Advances

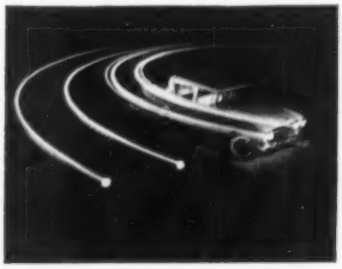
Jack Izard is the new assistant national advertising manager of Chevrolet. A native of Hattiesburg, Miss., Izard has been assistant zone manager at New Orleans since 1953. He joined Chevrolet in 1937 at El Paso, Texas, where he soon became district manager. After that he was promoted successively to business manager of the zone and regional offices at Dallas before going to New Orleans.

ANNOUNCING RAMBLER
with the Power and Economy News of '57!



Like Volume and Profit?
...SELL RAMBLER!

Plenty of room for 6 six-foot All Americans in the new Rambler. Actually more head room, more hip room, more leg room than the average of all other low-priced cars.



U-turns are a cinch! Rambler can turn around in streets too narrow for other cars . . . park with ease in spaces other cars pass by . . . take "hairpin" curves on an even keel.

Never before has any new-car franchise offered the opportunity that Rambler does. For Rambler is America's fastest growing car in popularity. Sales figures prove it. In 1956, while the industry average showed a general sales decline, *Rambler actually improved its market position!*

For '57, with crisp new styling and two great engine choices—an improved Economy 6 and a new, American-Motors-built 190-H.P. V-8—Rambler will have even greater appeal. And Rambler alone offers the incomparable handling ease and economy of the small European cars PLUS all of the comfort and luxury of big American cars.

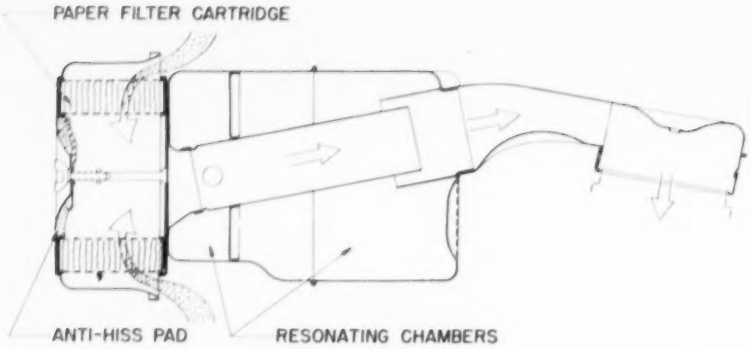
Why not look into the profit potential presented by Rambler. Call or write Dealer Development Department, American Motors Corp., Detroit 32, Michigan, for complete details—in confidence.

Now More Than Ever . . .

IT PAYS TO SELL

RAMBLER

American Motors Means More For Americans



The micronic carburetor air cleaner for 1957 Chrysler Corp. cars was tested in the gruelling grind of dirt-track competition. Fitted on Plymouth Fury, Dodge "500" and Chrysler 300B stock cars, it reportedly proved to be far superior to any other type of cleaner in the dust-laden atmosphere of the tracks. Servicing has been simplified, too, the only requirement being to remove and tap it against a hard surface every 5,000 miles. Replacement is recommended every 15,000 miles for full efficiency.

HOT TIP FOR SERVICING ALL WHEEL CYLINDERS!

(especially the many 1956 cars equipped with Expanders)

New

"E" Series Wheel Cylinder CUPS and EXPANDERS

MADE OF A NEW, HEAT-RESISTING COMPOUND YET REMAINS FLEXIBLE AT 40° BELOW ZERO!

HOTTER DRUMS AND CYLINDERS due to higher speeds and quicker stops call for EIS "E" Series Cups and Expanders. Heavy walls with less flare plus the proper spring tension on the Expanders insure good lip tension against the cylinder wall. Result — better sealing qualities!

EIS "E" Series Cups are packed and merchandised the way you want them —popular assortments in steel cabinets and in 5-Paks containing 10 cups (5 sets for 5 wheel cylinders.)

NO. A222 ASSORTMENT

Ask for "E" Series Kits. Many are available now at EIS Distributors.

5-PAK KIT (5 SETS)

ONE SET

OUR 25 YEAR

Many EIS Cylinders are now being delivered with "E" Series Cups at no extra charge. Kits and individual Cups with Expanders are slightly higher than the old style plain cups.

CYLINDERS
TOOLS
FLUIDS
CABLES
HOSES
KITS
SWITCHES

Write for catalog

EIS AUTOMOTIVE CORP., MIDDLETOWN, CONN.

Cadillac Alters Frame

(Continued from page 45)

with the 1957 engine. Efficiency is improved; output is increased and various components were rearranged to give a new, easily accessible battery location, as well as a hood which is 3½" lower.

Better efficiency results from better combustion which is achieved by a larger combustion chamber. The compression ratio is 10 to 1.

The output increase is attributed to "better breathing," the result of a new carburetor with larger secondary bores and a wider bore spread. Additionally, intake valves are ⅛" larger and the exhaust valves are ⅛" smaller.

Among the key moves and changes in rearrangement are a lower carburetor and air cleaner, relocation of power steering pump and the use of a water pump with right-hand inlet to provide clearance for generator belt to the left-hand mounted generator.

Two additional engineering developments are the new front-mounted air conditioning and the radio speaker which is located directly below the middle of the instrument panel.

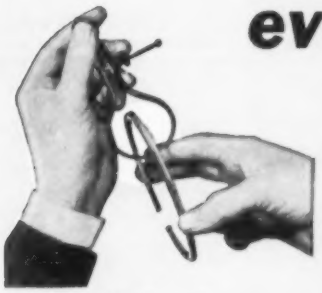
In the air-conditioning system, 100% outside air can be released through three outlets across the front of the instrument panel ledge. Some cooled air is released towards the floor while all roof ducts of former years are eliminated except on the Series 75 Limousine.

Marylanders to Hear Bell

Frederick Bell, executive vice-president of the National Automobile Dealers Association, will address the annual meeting of the Automobile Trade Association of Maryland Nov. 15 at the Sheraton-Belvedere Hotel in Baltimore.

Thousands of miles of dynamometer and rugged road testing prove Krome-Oil's ability to hold oil

You bet pre-seated Krome-Oil holds oil *even on toughest jobs*



This is Pre-seating

Pre-seating is a factory-applied lapping process equivalent to hundreds of miles of actual engine operation—assures instant oil control and customer satisfaction.

Handle the tough jobs right the first time—avoid costly comebacks

INSTALL KROME-OIL

Pre-seated Krome-Oil delivers fast break-in—still provides the long wear, cylinder protection and fine performance expected from a full chrome ring set. All major car and truck manufacturers recommend chrome plated compression and oil rings for today's high compression engines.

'51 through '55 model cars are beginning to come in for re-ring and re-bore jobs. Turn the best work out of your shop. Install pre-seated Krome-Oil. It does the job for you—for your customers.

AMERICAN HAMMERED
KROME-OIL PISTON RING SETS

Krome-Oil . . . easiest to install . . . best for your job

A full chrome ring set. Chrome on compression ring, on side rails of oil ring for longer life.

All-in-one Ring Envelope holds rings in installation sequence, a real boon to mechanics.

American Hammered

AUTOMOTIVE REPLACEMENT DIVISION • 2001 Sanford St., Muskegon, Mich.
Manufacturers of American Hammered Automotive Replacement Piston Rings
A Division of Sealed Power Corporation

Remember profit-packed American Hammered Power-Plus Service—
KOETHERIZING • GI-60 GROOVE INSERT

14" WHEELS ARE NO PROBLEM AT ALL

with

COATS TIREMAN

MODEL D-D

STILL ONLY $119.50 FREIGHT PAID

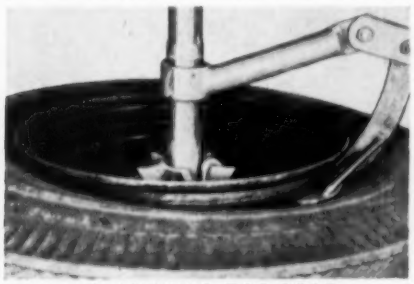
ROLL-A-WAY BASE OPTIONAL

(double duty model)

Yes, 14-inch wheels can be handled quickly and easily with the *Coats Tireman,* now fitted with *new* upper and lower bead loosener shoes. And of course, Coats' famous roller-action take-off and put-on tools have always been best for any passenger or light truck wheels from 12 to 21 inches in diameter — whether tubeless or conventional. See a demonstration, then compare. You'll agree!

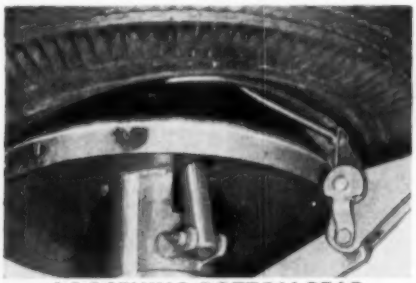
Coats' engineers, always seeking ways to improve the famous Tireman, began experimenting with 14-inch wheels months ago. Though the bead loosener shoes now in use worked satisfactorily, dozens of different designs were tried in an effort to make handling 14-inch wheels easier and faster.

Now, these newest bead loosener shoes are standard equipment on all Model D-D Tireman in production, and they are also available for the D-D and earlier models in use. See below how easily and cheaply you can change over your present Coats Tire Changer.



LOOSENING TOP BEAD

Here's how simply the new 14-inch wheels, regardless of type, are handled with the Tireman. Top and bottom beads are loosened without the slightest damage to sealing ribs or liners.



LOOSENING BOTTOM BEAD

Coat's *proved*-best mounting and demounting tools complete the tire-changing job as quickly as ever. There's no risk, no strain when you use the Coats Tireman. Why take chances with anything less.

ADAPT YOUR PRESENT COATS TIRE CHANGER TO HANDLE 14" WHEELS

New Bead Loosener Shoes are Available for:

Model D-D Tireman now in use ..... **Just $15.00**

Model 1C Conversion Kit (for round-top models 1C: upper arm & shoe, bottom shoe and new-type spring) ..... **Just $15.00**

Model 1B Conversion Kit (for older models — square top: top and bottom bead loosener complete) .....**Just $31.00**

Write for full details on the Service of 14-inch Wheels.

JACK P. HENNESSY COMPANY, INC.

WESTERN DIVISION OFFICES
3453 Cahuenga Boulevard
Los Angeles 28, California

MID-WEST OFFICES 244 E. Pearson St. • Chicago, Ill.

GENERAL OFFICES
12 Depot Square
Englewood, New Jersey

Manufactured by COATS COMPANY, Fort Dodge, Iowa

PIONEERS IN TUBELESS TIRE SERVICE EQUIPMENT

More Dealers Use COATS TIREMAN Than Any Other Make

IT'S SIX POINTS EVERY TIME

WITH HARRISON CORES!

plus that

BIG EXTRA POINT!

New money-saving deal on Harrison replacement cores means more profit for you. Check your United Motors Service zone office for complete details.

1. Huge pre-sold market—Every GM car has a Harrison radiator installed at the factory. That means a ready-made core market is waiting for you with Harrison—the original equipment line.

2. Availability—Any United Motors Service distributor or branch warehouse can supply you with Harrison cores. Call now . . . there's sure to be a United Motors Service distributor near you.

3. Quality—With Harrison cores, you're assured of maximum dependability, rugged durability. Every core is backed by 46 years of experience in the heat control business.

4. "Whirl-Cool" design—Scientifically designed louvered air cells create greater air turbulence for extra cooling action. It's a Harrison exclusive!

5. 100% solder bond—Each convolution of center stock—each air fin—is *completely* bonded to the water tube for more efficient heat dissipation and greater structural strength.

6. Three surfaces—Harrison cores are tailored to individual requirements. Three surfaces—cellular, tube-and-center, fin-and-tube—permit the engineering selectivity that assures the *right* core for each application!

FIN-AND-TUBE

HARRISON RADIATOR DIVISION, GENERAL MOTORS CORP., LOCKPORT, N. Y.

Watch "WIDE, WIDE WORLD" Sundays on NBC-TV

TEMPERATURES MADE TO ORDER

GM GENERAL MOTORS

HARRISON

Dear Bill,

When I see these "safety inspections" advertised I sometimes wonder how anyone can decide just what to inspect for "safety" and isolate it from any routine and complete inspection.

Take, for instance, a brake inspection which along with steering may be the backbone of any safety inspection. Any vehicle with bad brakes and steering will naturally be unsafe, but what if the engine is in bad tune? Say it has no acceleration worthy of the name or if ignition or fuel deficiencies, for instance, will finally cause it to stall in some busy highway or byway?

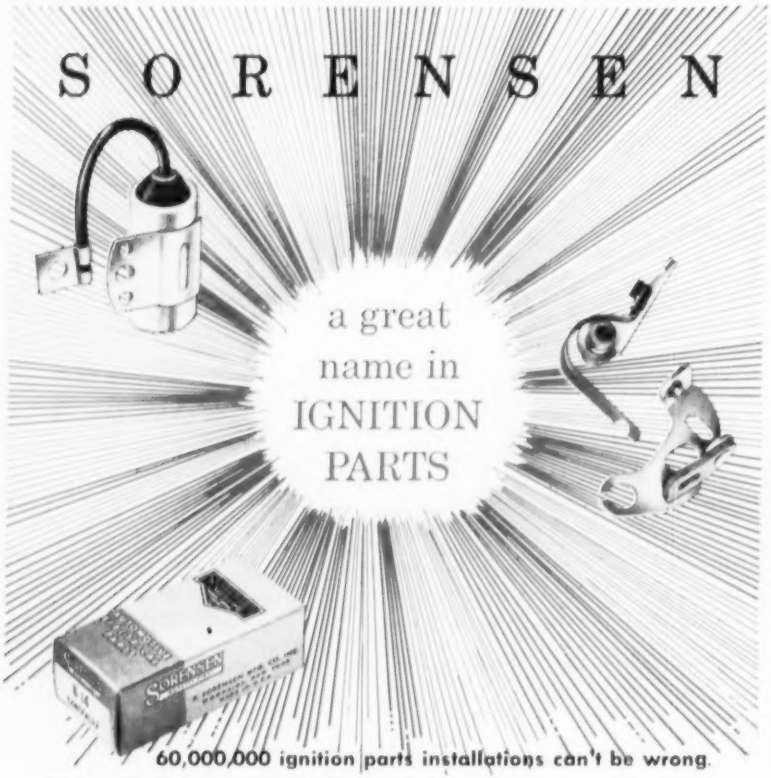
Now, what gets me curious is, is the driver with a sluggish car who's caught unexpectedly in the wrong lane when passing, and facing an oncoming car equaling his speed of 50 or 60 for a possible headon crash impact of 100 or more miles per hour, any safer than the guy with bad brakes who may bump a car who slows ahead of him with maybe a five- or ten-mile impact?

Or is the guy trying to start a dead car on a busy street or highway with cars whizzing by the seat of his pants any safer than a driver whose car wanders off the road when a worn tie-rod end lets go?

Not that I'm against any of these limited "safety inspections" that concern themselves with steering, brakes and lights. They are good as far as they go, but I wonder if the driver isn't lulled into a false sense of security by his car passing a steering, brake, lights and windshield wiper inspection.

I think that servicemen should take every opportunity to inspect their customers' cars completely at every visit to their shop. Any potential trouble they uncover will contribute to the driver's safety as much as the so-called safety tests, and the customer should be urged to keep up all parts of his car instead of relying only on a few special units and letting the rest deteriorate until it stalls him, or distracts him at some crucial moment in heavy or high-speed traffic.

A car with perfect brakes and steering can really get in bad on an unexpected sharp curve or a bump or washboard surface or combination of them all, if someone forgot to check the shock absorbers and the resulting lurch or sway is uncontrolled. And how often do you see a shock inspection included in a safety test?



60,000,000 ignition parts installations can't be wrong.

That's the Sorensen record fully backed by a complete service and profit producing program that never misses.

Remember:—it takes a first class product to deliver a first class job—Sorensen always delivers the first class product.

For all the details consult your local jobber.

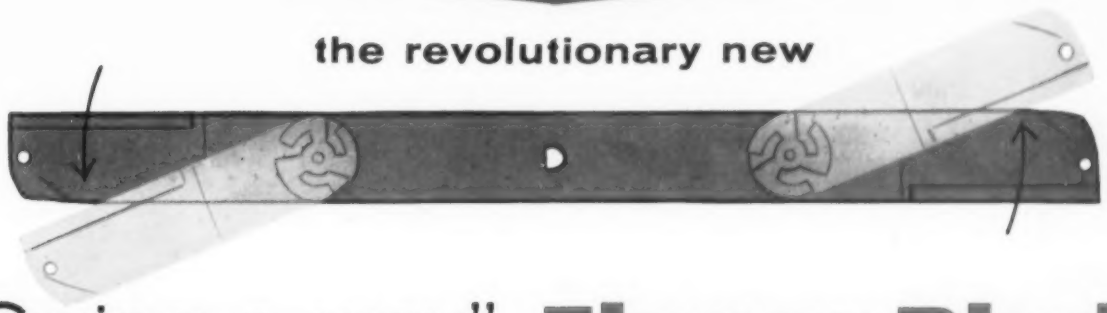
SORENSEN
STARTING · LIGHTING · IGNITION

IGNITION | P. SORENSEN MANUFACTURING CO., INC. WOODSIDE, N. Y. | CABLE & WIRE

Certified

...announces a MAJOR TRIUMPH IN POWER MOWER ENGINEERING!

the revolutionary new



"Swing-a-way" Flexor Blade

PAT. PENDING

...prevents driveshaft damage

Certified obsoletes ordinary rotary mowers with the FIRST and ONLY flexible airfoil shaped blade. When this new blade strikes an object, the shock of the blow is absorbed by the two flexible ends as they swing out-of-the-way, instead of by the engine drive shaft. This prevents the shaft from bending, and leaves the blade free to continue mowing. The ends snap back in a fraction of a second through centrifugal force. LOOK FOR THIS BIG SELLING FEATURE ON CERTIFIED . . . America's finest power lawn mowers.

Greatest rotary mower advancement... and Certified has it! Makes ordinary rotaries obsolete!

the Flexor Blade is an exclusive feature on every '57 Certified Rotary Mower

Model AE-180
24" deluxe trimmer-type riding rotary

Model RA-222
22" self-propelled heavy duty trimmer-type rotary

Model RF-22
22" heavy duty trimmer-type rotary

Model RM-20
20" deluxe heavy duty rotary

Model JK-50
18" trimmer-type rotary

Model EL-18
18" electric trimmer-type rotary

there's a Certified for every lawn

...America's biggest and best line!

Model LP-430—24"
Model LP-230—20"
Model LP-228—18"

Model PE-99
LAWN SCOUT
9" GAS EDGER-TRIMMER

Model NS-91
9" LAWN SCOUT
ELECTRIC EDGER—TRIMMER

Model RR-140
30" deluxe reel-type riding mower

Model TD-170
24" economy reel-type riding mower

ALL-PURPOSE FOLD-AWAY LAWN SWEEPERS
Model LS-240 24"
Model LS-200 20"
Model PS-124
24" Power Model

manufactured by
WESTERN TOOL AND STAMPING CO. 2725 Second Ave., Des Moines 13, Iowa
the world's largest producer of power lawn mowers

MAIL THIS COUPON TODAY! No obligation of course

WESTERN TOOL AND STAMPING CO.
2725 Second Avenue, Des Moines 13, Iowa

☐ Please send me free color literature on complete line.
☐ Please have a representative call on me.
☐ I am a dealer. ☐ I am a jobber.

Name _____
Company _____
Street _____
City _____ Zone _____ State _____

Probably the most important safety check would be a good thorough physical and mental examination of the driver, but since we aren't authorized to enter into this major-cause-of-accidents inspection field, I think we should make the vehicle inspections as complete and often as we can to put this transportation instrument in the best possible condition so he can get back home in condition to pay our bill—and run up a few other subsequent bills for honest service work.

The safety check itself is only part of the inspection and should only be used when the law and limited time make it necessary. Even then the vehicle should be earmarked for a thorough check at a later time.

Yrs.
Ed.

Chrysler Is Lower

(Continued from page 43)

motion, actuating Chrysler's Safe Lock door latches, which bind body and doors together into "a protective ring of steel."

A new bubble canopy windshield on the New Yorker convertible curves from top to bottom as well as from side to side, increasing visibility. The rear window of the New Yorker two-door hardtop extends high into the roof line, providing more than one-third more rear window area than ever before.

For 1957 Chrysler introduces high-performance three-speed Torque-Flite, an improvement on the pushbutton drive introduced by Chrysler in 1956. It is standard equipment on New Yorker and Saratoga models and optional on Windsor models. Torque-Flite combines a high-performance torque converter coupled with an automatic three-speed planetary gear box for maximum torque-multiplication. Transmission control is through a five-button panel to the left of the steering column out of reach of children. The neutral button doubles as starter button—another safety feature which automatically places the car in neutral when it is started.

Protected Against Carelessness

Protected against damage due to careless operation, Torque-Flite operates automatically once the "D" (Drive) button is depressed. Pushing the "R" (Reverse) button when the car is moving forward faster than ten miles per hour automatically shifts the transmission to neutral range. An extra safety feature is the use of the "1" (first) and "2" (second) range buttons for positive deceleration on steep mountain roads. Torque-Flite downshifts for rapid, safer passing at any speed under 70 miles per hour when the accelerator is floored.

Compression ratio of the Spitfire engine in the Windsor series is increased from 8.5 to 9.25 to 1, bore diameter increased to 3.94", and displacement increased to 354 cubic inches, resulting in a substantial increase in horsepower.

Spitfire engines in Saratogas include four-barrel carburetors.

The new combined heater-air conditioner system is situated behind the dash panel, using space at the rear of the engine compartment. A single set of controls is used for both heating and cooling. Air for heating is taken from the outside through a flush cowl vent ahead of the windshield. In air conditioning, both recirculated and fresh air are available.

Your Customers Get MORE from P&D COILS!

More for your customers means more for you. For instance, P & D Super Power Coils are designed and Engineered:

- **For Modern High Compression Engines**
- **For Highest Performance and Durability**
- **For Easier Starting**
- **To Deliver More Power**
- **To Save Fuel**

YOUR CUSTOMERS DESERVE THE BEST. SELL THEM P & D COILS AND OTHER P & D PRODUCTS AND WATCH YOUR BUSINESS GROW

HAVE YOU A P & D CATALOG?

GENUINE P&D PARTS

MANUFACTURING CO., INC.
Established 1920
19-02 Steinway Street, Long Island City 5, N. Y.

Export Sales: Borg Warner International, 36 So. Wabash Ave., Chicago 3, Ill.

From Maine to California . . . the new sales leader!

THOR AIR IMPACT WRENCH

Handles wheel nuts in seconds

Right-angle attachment reaches body bolts easily

Wire brush attachment whisks rust from rims

Hard-to-get-at spring nuts easily removed

Speeds removal of cylinder head bolts

CONTROLLED TORQUE!

Most Powerful ½" Square Drive Impact Wrench on the Market!

Completely new impact mechanism—only FOUR MOVING PARTS!
Finger-tip push button reverse for one-hand operation.

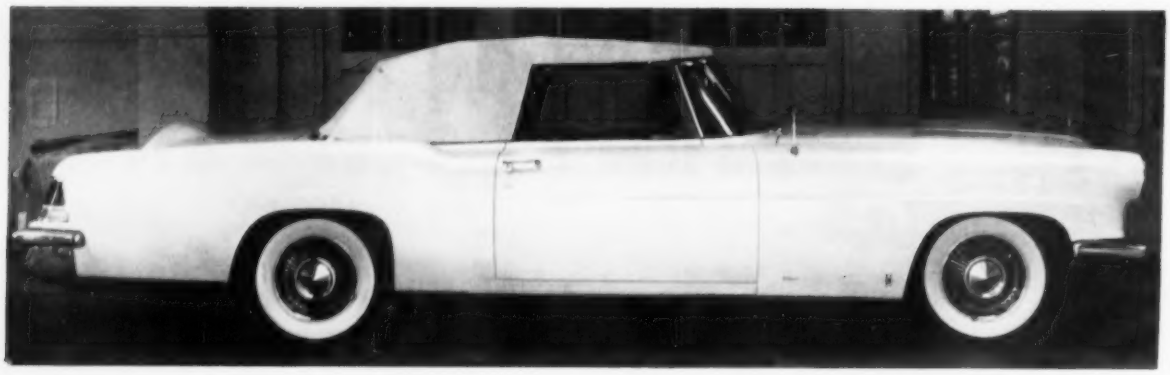
Thor
PORTABLE POWER
TOOLS

No wonder it has swept the country! This compact, powerful, easy-to-handle Thor Impact Wrench with the speed and torque regulator and unlimited versatility is just what mechanics wanted! Ask your Thor Automotive jobber for a demonstration. Thor Power Tool Company, Aurora, Illinois.

SOLD ON EASY PAYMENT PLAN

THOR POWER TOOL COMPANY

Branches in all principal cities



The Continental Mark II Cabriolet Convertible, which made its debut last month at the Texas State Fair in Dallas, is the result of the joint efforts of two well-known names in the automotive industry—the Lincoln Division of Ford Motor Co. and the Derham Custom Body Co. It is the first true Continental convertible built since production of the Lincoln Continental series was suspended in March, 1948. The cabriolet is 57" high and carries out the modern formal theme typical of the Continental Mark II hardtop coupe, a prestige car being produced in limited volume by Ford. Its exterior finish is a pearlescent white lacquer, while interior trim is of red and pearlescent white leather.

HYDRAULIC VALVE TREATMENT

For Top Engine Performance

SAVES ON GAS

SAVES ON OIL

SAVES ON REPAIRS

CORRECTS!

Frees hydraulic valve lifters

Permits valve lifters to operate quietly

Dissolves engine sludge and varnish

Increases power and gas mileage

MAINTAINS!

Keeps valves and lifters free

Cools as it lubricates

Protects engine parts

Increases the life of your car

DO YOUR CUSTOMER A FAVOR! TELL HIM ABOUT THIS EASY Two-Step Treatment — He'll show his appreciation in repeat business!

Order from your jobber, or write to Dept. 171

EMEROL MANUFACTURING CO., INC.

242 WEST 69TH STREET, NEW YORK 23, N. Y.

Servicing Wiper, Washer

(Continued from page 60)

1.—Move the wiper arms by hand up into the center of the arc, midway between the two extremities of travel.

With arms in position, motor drive lever should be in vertical position. *Important*: Make sure motor drive lever remains in vertical position during all steps of adjustment procedure.

2.—While the arms are in center position, remove the arm to reach the tensioning locking screw in the end of the shaft. Do not alter position of shaft.

3.—Loosen the screw and give it a full turn beyond its loosened position. Tap the screw end and allow the spring take-up to properly adjust the cable loading.

On late-model 1953 cars and subsequent production no screw is located in end of shaft. To retension cables, press knurled driver to allow spring take-up to automatically adjust cables.

After tensioning as above indicated, turn wiper on, then off, to allow wiper to park under its own vacuum. Reinstall the arms and blades in the parked position.

Cable removal procedure:

3 GUIDES TO GREATER PROFIT!

... in Your Service Department

"VIEW-FINDER" MIRROR provides drivers greater visibility, less glare! A flick of the finger automatically places "View-Finder" Mirror in correct position for day or night driving!

REMOTE CONTROLLED OUTSIDE MIRROR is adjusted from inside the car! Customers like the way Guide's Outside Mirror adds distinction to their cars!

AUTRONIC-EYE "sees" approaching headlights, signals other drivers to dim their bright lights by automatically dimming yours! Autronic-Eye adds safety and value to a car!

Here are three Guide accessories that mean greater safety and convenience for your customers, higher value on their cars—greater profits for you!

Guide's new "View-Finder" Mirror, Remote Controlled Outside Mirror, and "Autronic-Eye" are products of constant research, and represent more than fifty years' experience in the accessory field.

These Guide products—designed specifically for easy installation—are profitably desirable items in your service department! Guide products spell customer satisfaction. And that spells higher sales, greater profits!

GM GENERAL MOTORS

Guide Lamp... BRIGHTEST NAME IN LIGHTS

GUIDE LAMP DIVISION • GENERAL MOTORS CORPORATION • ANDERSON, INDIANA

Release tension by loosening screw in shaft or push in on driver. Hold this position, reach under dash and pull cables to produce a slack. Tighten screw or release driver to hold cables in slack position. Disconnect cable end at motor drive lever or drum.

Windshield washer maintenance:

How to check windshield washers:

All checks made with car engine running and with minimum of 1" water level. See Fig. 10.

1.—No water flow at nozzles:

Remove water hose. Press control button (three seconds and release for standard model). If water flows from pump outlet (Figs. 1 and 2), check water line and nozzles for obstruction.

2.—No water flow from pump:

Disconnect vacuum line (Figs. 1 and 2) and check vacuum while pressing control button. If no vacuum, check vacuum line and control. If vacuum is sufficient, replace pump.

Washers used with co-ordinator:

For Mag-nu-matic Hydrostatic (Fig. 3 in Fig. 10), use steps 1 and 2 as above, but check fuse and control connection before replacing pump.

For Nu-matic Hydrostatic (Fig. 4 in Fig. 10), use steps 1 and 3.

3.—Disconnect vacuum line and check for vacuum. If no vacuum, check line for obstruction or collapse.

4.—Disconnect small control hose (Fig. 4), and cap connection on pump with finger. Release finger and recap several times. Each time should bring a surge of water from the water hose connection. If no water, replace pump. If water surges from hose connection, check control and line running to control.

Co-ordinator adjustment:

Bleed screw shown on co-ordinator (Fig. 5) is turned clockwise to lengthen wiper operation, counter-clockwise to shorten.

New washer with motor coupler:

To check pump action, use same steps as above for Nu-matic Hydrostatic pump (Fig. 4).

Motor coupler adjustment:

Caution: Hose lines must be connected to nozzles for this check.

Wiper motor coupler must be clear of any wire harness or other objects that would obstruct its free movement.

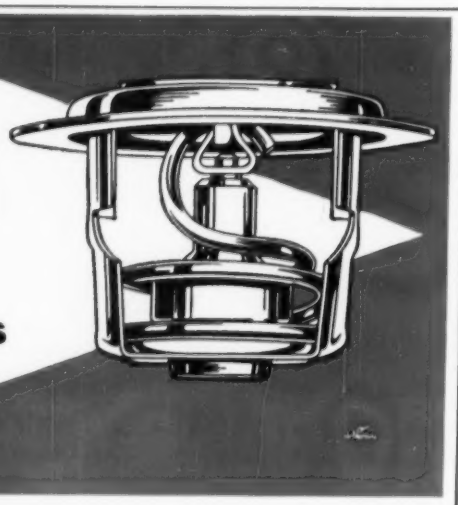
Adjustment screw shown (Fig. 6) is turned clockwise to lengthen wiper operation and counter-clockwise to shorten.

1.—Washer pump works properly but wiper does not start. Check small line to coupler for obstruction. If line is clear, apply vacuum direct to coupler. If coupler operates, replace pump assembly; if not, replace coupler.

2.—Wiper motor fails to stop at the end of the washer-wiper cycle. Remove adjustment screw and operate washer several times to flush out any dirt that may be deposited behind the adjustment screw. Reinstall screw and adjust washer-wiper cycle.

If above operation fails to stop wiper motor, replace pump assembly.

More to Tell
More to Sell
with Dole
Thermostats



There is a real sales story back of Dole Thermostats. They are especially designed for modern, high-pressure cooling systems. They assure a better performance on any car and save gas and oil. The power exerted by the trouble-free Dole element is positive and works against high pump pressures.

Be sure to remind your customers to make the replacement with a Dole Thermostat a part of every motor tune-up job.

Original equipment on most leading cars and trucks. Be sure your stocks are complete.

The Dole Valve Company
1901 Carroll Ave.
Chicago 12, Ill.
Representatives in All Principal Cities

Standard equipment on 37 makes of . . . cars, trucks, tractors, engines

Control with
DOLE
TRADE-MARK

Kent-Moore Names Cardon

H. P. Cardon has been named assistant general sales manager of Kent-Moore Organization, Warren, Mich., according to President J. D. Adair. Cardon, who will continue his previous activities as account executive, will also assist Director of Sales J. M. Seanor.

Brighten your profit picture with these 5 Victor Sealing Assortments!

Fast job turnover is the real key to profit in any service shop. One way you can save time is to have on hand at all times the most needed stocks of *original equipment quality* Victor Sealing Products.

Here are five basic assortments of Victor Sealing Products you can order now to help you win and hold more customers with fast, profitable service.

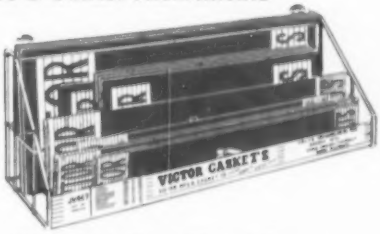
Order today from your Victor Jobber. Victor Mfg. & Gasket Co., P. O. Box 1333, Chicago 90, Ill. In Canada: Victor Mfg. & Gasket Co. of Canada Ltd., St. Thomas, Ont.

Rack Up Profits with These 2 Gasket Assortments

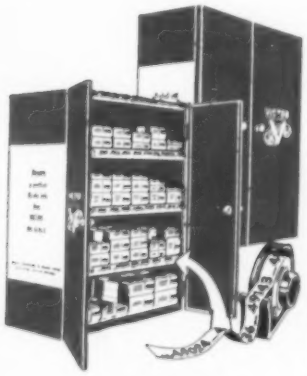
Every service shop can use one or more racks of these fast-moving valve grinding and oil pan sets —for Fords, Mercurys, Chevrolets, Dodges and Plymouths.

Assortment JV467A — 13 sets—in handy display-storage rack at no added cost. Covers 75% of jobs coming in your shop—up to and including 1953 models. *(In Canada, Assortment JV467-2)*

Assortment JV468 — 12 sets—also in sturdy display rack with no extra charge—for 1954 and 1955 models.



Profits at Your Finger Tips in These Oil Seal Assortments



Be ready to sell Victor oil seals with every wheel repack or brake job. Assure customers of safer braking—with better profits for yourself. 3 assortments to choose from—all cover current popular cars, including '56 models. Pay for seals only—get attractive, sturdy steel display-storage cabinet at no extra cost. All seals boxed in pairs and completely labeled as only Victor does it.

JV-21C — small assortment of wheel bearing oil seals. 25 different items—62 seals (31 pairs).

JV-22C — complete assortment of wheel bearing seals. 45 different items—104 seals (52 pairs).

JV-23B — front wheel bearing seal assortment—a favorite with lube stations. 24 different items—54 seals (27 pairs).

With each oil seal assortment you also get a useful stock numbering system that tells at a glance what's on hand and what to reorder.

Profitable Gasket Sets for Automatic Transmission Overhaul Jobs

Victor scores a *first* with these assortments! Everything for a transmission overhaul job—all gaskets, oil seals, "O" rings and packings in *one* package, nothing else to buy.

19 sets available — JV901 to JV919 incl.—for Ford-O-Matic, Merc-O-Matic, Hydramatic, Dynaflow and Power Glide transmissions—1948 to 1956 models.

Complete Timing Case Cover Sets Help You Profit

Victor also is the first to package all gaskets, oil seals and packings needed for timing cover service in *one complete package*. Oil seals in each assortment are anchored within package to prevent damage to gaskets. New numbering system makes it easy to spot the set you need.

48 timing case cover sets—JV-750 to JV-798—for popular cars on the road—1932 to 1956 models.

Seasonalize with Profit — with Victor Cooling System Gaskets

Put this Victor display carton of water outlet and thermostat housing gaskets on your counter NOW! Reminds customers to have thermostats and cooling systems checked for seasonal change-over. Plenty profitable, too, *if* you have these needed gaskets on hand. Choose from 2 assortments.

JV137E — large assortment—26 varieties—270 gaskets—covers popular cars '34 to '56 incl. Each variety individually boxed and labeled with application and Victor number for quick, easy selection.

JV138D — small assortment—11 varieties—120 gaskets—all fast-moving numbers. Individually boxed and in display carton same as big assortment. *(In Canada, Assortment JV138-3)*

VICTOR

Sealing Products Exclusively

GASKETS
OIL SEALS
PACKINGS

Sold by leading wholesalers everywhere

The 100% Coverage Line—for Cars • Trucks • Tractors • Stationary Engines

IT'S HERE!
the Sales
wix
SPIN-ON TYPE
PC • 15
FULL-FLOW
OIL FILTER
PATENTS PENDING

Opportunity of a Lifetime!

Exciting? YES! We're talking about the tremendous sales opportunities for all WIX Distributors and Dealers in the new "Spin-On" WIX Oil Filter Conversion for all present Ford, Mercury and Lincoln cars and trucks, back to 1952, having full-flow filtration systems. These millions of vehicles can be converted easily and swiftly with the sensational, new WIX WF-15. It means profitable repeat business for you!

INSTALLATION OF THIS GREAT NEW OIL FILTER CONCEPT IS INEXPENSIVE, SIMPLE AND QUICK . . . JUST REMOVE EQUIPMENT FILTER AND INSTALL THE WIX ADAPTER FOR THIS MODERN "SPIN-ON" WIX FILTER!

1. Sensational ease in servicing . . . no tools required. 2 easy steps . . . just a twist of the wrist — discard the used filter — spin on the new.
2. A self-contained Filter, so simple it eliminates 12 of the 14 steps now required to make a Cartridge change. No Filter housing, no cover, no cover bolt, no loose gaskets, no oil lines!
3. A new relief valve with every Filter change — it's built-in! Eliminates present type, permanent relief valves that can become clogged with accumulated dirt and sludge.
4. Built-in gasket provides positive seal. No leaks.
5. Special spring-loaded valve in Filter base, retains sludge and old oil — no drain-back, no mess during Filter change.
6. Extruded aluminum Filter body with exclusive grip-paint top for hand installation. Lightweight, rustproof.
7. This new full-flow Filter provides maximum flow rate and exceptional capacity for microscopic particle retention.

This is the forerunner of modern-day Filtration equipment. You'll want to get in-the-money early. Ask for the whole profit-making story, NOW!

LOOK FOR THIS GREAT NEW OIL FILTER DEVELOPMENT AS ORIGINAL EQUIPMENT ON AMERICA'S LEADING CARS IN 1957

wix®

ENGINEERED FILTRATION

AUTOMOTIVE · INDUSTRIAL · RAILROAD

WIX CORPORATION · GASTONIA · N. C.

In Canada: Wix Accessories Corp. Ltd., Toronto

Completely modern, the truck height plant of Mac's Super Gloss Co., new eastern factory in Cincinnati, O., will manufacture the company's complete line of glazes, polishes and cleaners. Faster service to warehouse distributors and jobbers through the East, Middle West and South will be made possible through this expansion. The main factory in Los Angeles will continue to serve the 11 western states.

●

3 ways you can make more money

You have a golden opportunity every time you sell gas and lift the hood. If the vehicle needs *gas cap, oil filler cap* and *pressure cap,* you can quickly ring up extra profits of $1.22...around $2.00 if you sell him a locking gas cap. Your customers will respect your establishment as real PREVENTIVE MAINTENANCE HEADQUARTERS. More money and more customer confidence!

Sell Complete Line

Equip yourself with Stant's Complete Line . . . the recognized standard with *32 years of original equipment experience* on filler caps for cars, trucks, tractors and direct to radiator manufacturers! Organize your cap stock into one, systemized, easily-inventoried unit . . . the Stant MU-600 Merchandising Display . . . colorful silent Salesman . . . takes only 21" of wall space.

STANT MANUFACTURING CO., INC.
Connersville, Indiana

EVRSEAL
STANT
RADIATOR • GAS • OIL
CAPS

Used on America's Finest Automobiles as Standard Equipment for a generation

Studebaker Offers "Firsts"

(Continued from page 51)

Ranking high on a long list of safety features is the Studebaker "safety fin" brake. Finned drums increase cooling area 100%. These brakes are rated the most efficient for any American automobile because they permit consistent quick, straight-line stops from high speeds without the fading which is caused by heat, engineers said.

Another Studebaker safety innovation, the safety-eye speedometer is set in a newly styled and larger housing for 1957. Mounted strategically behind a new dish-type steering wheel on top of the dashboard, the line-of-vision device permits the driver to keep a constant check on speed without dropping his eyes away from the road. Magnified speed readings are indicated in large numerals that light up green from 0 to 35 miles per hour, orange from 35 to 60 and red for higher speeds.

Crash-tested safety door latches, pioneered as standard equipment by Studebaker last year, are complemented in 1957 by new, stronger seat construction. The new seat construction is to specifications reportedly formerly available only on police cars at extra cost. A padded dash is standard equipment on all President models, while a padded safety roll on the back of front seats has been made standard for all models.

New for 1957 is a double socket safety rear view mirror which is hinged to swing out of the way when struck.

A special safety device, developed by Studebaker, is continued in 1957 models. It is the hill holder which prevents any roll-back of the vehicle when it is stopped on an incline. The hill holder is standard equipment on all V-8 models with standard or overdrive transmission.

Improved, faster steering has been engineered for all models.

What makes customers come back for more?

They'll all come back if you give 'em the best. When it's a bearing job... *just tell 'em it's TIMKEN*!

Having a daily beauty contest is probably a good way to attract customers, but what makes them really remember you when they need repairs is to give good service.

And one good way to do this is to show them that you use the highest quality replacement parts. When it comes to bearings, there'll be no doubt when you use Timken® tapered roller bearings. That's the one bearing your customers recognize for quality. The Timken Roller Bearing Company, Canton 6, O. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

TIMKEN

TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS

NOT JUST A BALL ○ NOT JUST A ROLLER ⬭ THE TIMKEN TAPERED ROLLER ⬭ BEARING TAKES RADIAL AND THRUST LOADS OR ANY COMBINATION

British Designer Lawrence Bond, already known in his own country for a three-wheel Minicar, has come up with what he hopes will be a successful low-priced sports car. Named the Berkeley, powered by a 322 c. c. engine in a racy, sporting, fiberglass body, Bond's "baby" is claimed to do 60 miles to the British or Imperial gallon of gas and 70mph. Export price in England, according to the manufacturers, Berkeley Coachwork, Ltd., Biggleswade, is $1,064.

There's OIL in them thar MOUNTS*...

*OIL does more damage to motor mounts than anything else!

It's a fact! More motor mount deterioration can be traced to oil than any other source. With more cars on the road, it doesn't take a mathematician to figure out the market for replacement mounts is growing and growing. Remember, oil-damaged motor mounts can lead to serious trouble in today's high-powered engines. So check motor mounts regularly — save customer comebacks and earn extra profits, too.

Armor-Flex MOTOR MOUNTS

"The complete replacement line"

Doan MANUFACTURING CORP.

1761 LONDON ROAD • CLEVELAND 12, OHIO

Right Tools Mean Profits

(Continued from page 41)

quipment, it was found that the brake drums (although new) were out of round far beyond the maximum specifications. Also, the new brake shoes which had been purchased as an assembly with the lining attached, were warped and only about 20% of the lining surface was contacting the drum. With the proper equipment all of these conditions were quickly corrected and the job again road-tested. This time it was okay.

And there was the small-town dealer who lost the sale of quite a number of cars because his demonstrators' brakes would not stand up to a few crash stops without fading. All attempts of his poorly-equipped shop failed to correct the trouble. With proper equipment the brake drums could have been trued and the brake lining surfaced, thus assuring adequate lining-to-drum contact, putting the brakes at their best so they would stand the test.

Here a few dollars saved by not purchasing the necessary shop equipment cost many dollars which could have been made in profit on the sale of the new cars.

Greater demand for performance is placed on our cars today than ever before. That performance was not put there through guesswork, nor will it remain there through guesswork.

It takes the proper tools and "tech" knowhow, to assure "customer satisfaction" with our service.

Savannah Dealers Elect

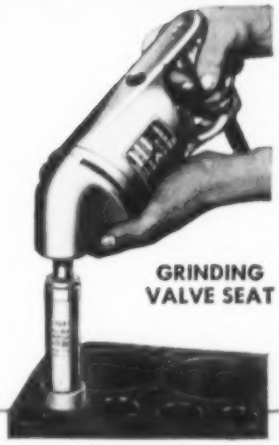
The Savannah (Ga.) Independent Automobile Dealers Association has elected Joseph E. Inglesby president; William D. Carter, vice-president; Marion Davis, second vice-president; Carl Harmon, secretary, and William E. Horne, treasurer.

Reproduce Factory Precision

with SIOUX

Dual Action Valve Seat Grinders

THE GREATEST possible accuracy can be obtained with the SIOUX Dual-Action Valve Seat Grinder and SIOUX Tapered Pilots. SIOUX Tapered Pilots are precision tools and offer the most positive guide known. The Dual-Action is a controlled fine vibration for grinding and dispersion of the cuttings with the grinding wheel mounted for full contact with the valve seat. It is a perfected system.



GRINDING VALVE SEAT

DRESSING GRINDING WHEEL

NEW SPLINE DRIVE IS MORE ACCURATE
LASTS FROM 10 to 20 TIMES LONGER THAN OLD HEX DRIVE

HEAVY DUTY DRIVER

FACTORY APPROVED SETS FOR TRACTOR, TRUCK, RAILROAD, DIESEL

Allis-Chalmers, American-Locomotive, Baldwin Locomotive, Case Tractor, Cooper-Bessemer, Ferguson Tractor, General Motors, Hercules Engines, Ingersoll-Rand, International Harvester Truck and Tractor, John Deere Tractor, Massey-Harris Tractor, Minneapolis-Moline Tractor, Oliver Tractors, Onan Engines, Reo Motors, White Motor Trucks.

DRESSING GRINDING WHEEL

SIOUX

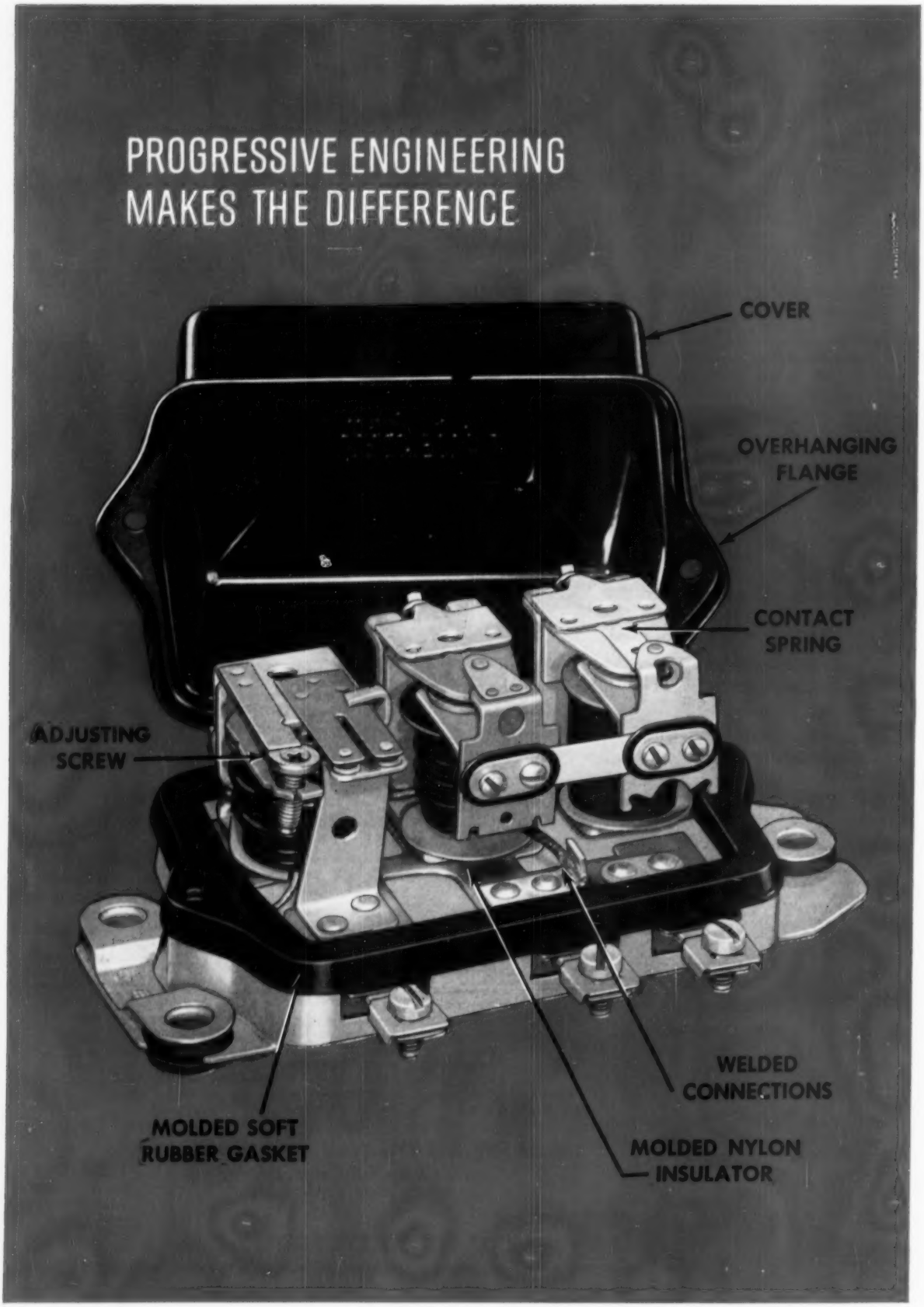
USE SIOUX ALL THE WAY THROUGH . . .

STANDARD THE WORLD OVER . . .

ALBERTSON & CO., INC.

Sioux City, Iowa, U.S.A.

ELECTRIC IMPACT WRENCHES • GRINDERS • FLEXIBLE SHAFTS • POLISHERS • DRILLS
HAND SAWS • SANDERS • VALVE FACE GRINDING MACHINES • ABRASIVE DISCS


PROGRESSIVE ENGINEERING
MAKES THE DIFFERENCE
COVER
OVERHANGING FLANGE
CONTACT SPRING
ADJUSTING SCREW
WELDED CONNECTIONS
MOLDED SOFT RUBBER GASKET
MOLDED NYLON INSULATOR

DELCO-REMY ANNOUNCES NEW WATERPROOF STANDARD REGULATORS WITH IMPROVED PERFORMANCE

Better electrical performance and greater dependability in any weather are important user benefits found in Delco-Remy's new waterproof standard generator regulators, now available for general replacement use.

And here are the features that make them the *right* regulators for millions of Delco-Remy equipped cars and trucks.

1. New overhanging one-piece formed-steel cover and mating base shed road splash . . . convenient attaching screws are *outside* the enclosed area. Molded soft rubber gasket seals out harmful oil and water vapors.
2. Integral sleeves of molded nylon insulator form permanent seal around rivets—assure watertight base.
3. New, longer, more flexible armature contact spring on voltage regulator unit assures more positive closing of contact points for smoother operation.
4. Welded electrical connections, and highest quality tungsten and non-tarnishing precious metal contact points, assure minimum resistance, maximum durability.
5. Special fine thread screw-type controls allow easy, highly accurate adjustment of all three units.

Always replace with Delco-Remy waterproof regulators when you service Delco-Remy equipped cars and trucks. These improved regulators are available from your car or truck dealer or the United Motors System.

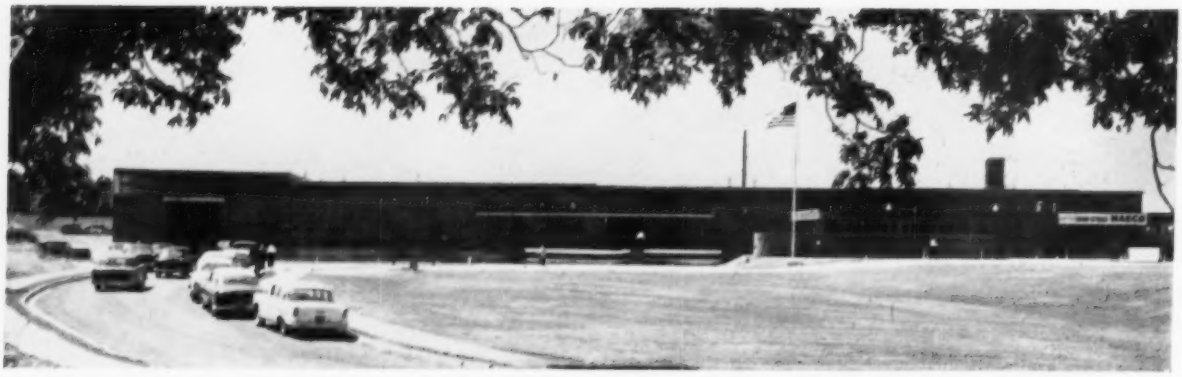
DELCO-REMY • DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA

GM GENERAL MOTORS

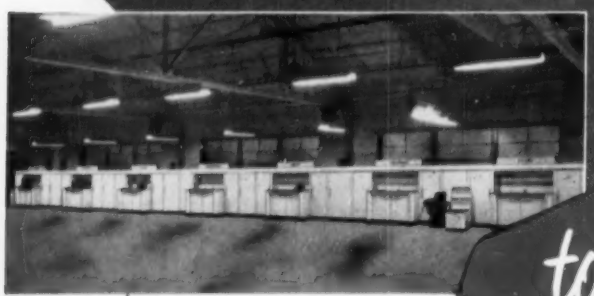
GENERAL MOTORS LEADS THE WAY—STARTING WITH

Delco-Remy

ELECTRICAL SYSTEMS



The Hartwell, Ga. plant of the Monroe Auto Equipment Co., located approximately 100 miles from Atlanta on the Hartwell Railroad, connecting with the Central of Georgia Railroad, is also on main trucking arteries. It is strategically located with regard to proximity to raw and semi-processed materials produced in the area and an adequate supply of skilled and semi-skilled workers. Production of shock absorbers for cars and trucks has begun and the plant, as completed, has a capacity of 7,500 shock absorbers per shift per day.



to . . .
shop service area

Shure-built equipment . . . means more sales and greater profit. A neat, attractive reception area creates customer confidence and good-will . . . result:—more sales. An orderly, easy-to-maintain service area creates efficiency, holds good mechanics . . . result:—more satisfied customers; more repeat business. Shure-equipped shops get and keep the profitable business!

Ask your jobber or write us for descriptive catalog on entire Shure-built line

Shure
MANUFACTURING CORPORATION
1601 S. HANLEY RD. • ST. LOUIS 17, MO.

Built Truck Service

(Continued from page 40)

Jennings' knowledge of parts also leads to a great many extra sales of International parts for use in trucks of other makes. His knowledge of parts that can be used interchangeably in different makes of cars and trucks is well known in the trade. The result is there is rarely a day he does not receive calls about substitutions.

The company recently purchased a small farm adjoining its premises, on which it has started a truck graveyard to supplement the parts stock. It has already proven valuable in supplying parts for emergency repairs on other makes of trucks. This has been especially true of old models which are most apt to need such repairs. Officials have also found many of these old models are owned by small operators who have to count their pennies and are glad to save money by buying used parts. Even when used parts are installed with the definite idea of replacing them with new parts, the truck is kept in operation until the new part arrives.

Overtime work in the shop to get jobs out promptly has also been common, in spite of every effort to avoid it. When overtime is required to get a job out the same day it comes in, no extra

NEW AROLUBE LINE

steps up lube profits everywhere!

with *NEW* AL-207 PUMP

Warranted for 3 Years or 10,000 lube jobs . . . because it's so advanced in design and performance! ARO warrants the AL-207 *Air Motor* to be free from defects in workmanship and materials for 10,000 lube jobs or 3 years, whichever occurs first, from date of purchase!

This exciting new Arolube line is today's top moneymaker in lube service . . . with trend-setting styling and world-beating performance! Powered by the famous AL-207 Pump . . . not a single failure in 12,260 grease jobs during tests ranging from torrid heat to frigid cold. Uses *less* air and *fewer* strokes to pump *more* lubricant! Arolube features add up to more sales, more profit for you, with big savings in operating costs! See your Automotive Wholesaler.

THE ARO EQUIPMENT CORPORATION
Bryan and Cleveland, Ohio
Aro of California, 3141 S. Grand Ave., Los Angeles 7, Calif.
Aro Equipment of Canada, Ltd., Toronto 15, Ontario
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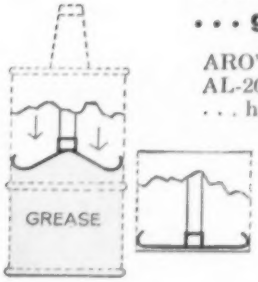
ARO®

LUBE EQUIPMENT
Also . . . Air Tools . . . Aircraft Products . . . Grease Fittings

NEW "DRUM KLEEN" FOLLOWER
. . . gets out all the grease!



ARO's "Drum Kleen" Follower used with AL-207 Pump does a fast, clean, thorough job . . . handles heavy greases easily at low temperatures . . . ends messy hand transferring! Its flexible edge flexes over dents, ribs or ring indentations . . . keeps out dust, dirt, contamination . . . while assisting in removing all the grease—right down to the bottom of the drum. See it now!

this one you'll PRIZE!

mechanics' FIRST CHOICE

Ingersoll-Rand

SIZE 403 AIR IMPACTOOL

- RUNS NUTS
- DRILLS
- REAMS
- DRIVES SCREWS
- SAWS HOLES
- WIRE BRUSHES
- TAPS
- BORES WOOD
- DRIVES STUDS
- DRILLS MASONRY

Don't take our word for it . . . ask any of the thousands of mechanics now using the Ingersoll-Rand Size 403 Air Impactool. No other ½" drive tool, air or electric, gives you so much power and dependability.

Handles all but the largest nuts and bolts on cars and trucks. Compact 5 pound design makes the 403 easy to handle all day long . . . gets into those hard-to-get-at spots with room to spare. Easy-to-apply attachments multiply its uses.

Compare the rest—then buy the BEST! Call your Ingersoll-Rand jobber now for a free demonstration in your shop!

Ingersoll-Rand

11 Broadway, New York 4, N. Y.

BBA-336

Originators of Impactools AIR & ELECTRIC

charge is made by the management.

Jobs are refused after the day's shop capacity has been sold, but not all jobs can be completed in eight hours. There are enough of these so that Stephen E. Triplett, service manager, and his boys frequently have to come back after supper.

However, the shop has one overtime rule which it never breaks. No mechanic is allowed to work more than 12 hours in any one day.

"By the time a man has put in eight hours here he is ready to go home, and we try our best not to have to ask him to come back. If we do have to ask him back after supper, four hours is the limit, because after that it is taking too much out of him," said Triplett.

By the time this reaches print it was hoped to have a night shift in operation which would eliminate both getting up at night to get parts for customers, and overtime work. Men for this shift were being hired and were breaking in on the day shift.

Night work will be limited to customers' repairs. The reconditioning of trade-ins and new truck body construction, which accounts for a gratifying volume of sales, will be reserved for day work.

Pushing the sale of flat-bed lumber bodies and chicken bodies—the two most used types in this area—has afforded enough truck body work to justify a separate truck body shop that is accounting for a growing volume of repair work.

This shop does not require the special equipment needed for an efficient passenger-car body shop, but it does require specially trained mechanics.

Appointments are another method used to help customers reduce out-of-service time. Customers are encouraged to make advance appointments for routine service work and to have their trucks at the shop at opening time. This has the double advantage of enabling the customer to have the work done when he can best spare the truck, and the shop to plan its work more effectively.

Whittington summed it all up with, "Anything that reduces the customer's out-of-service time and still gets the work out right helps to build truck service sales."

In the budget of the average American family, automobiles and their fuels and maintenance rank immediately below food, shelter and clothing.

Servicing Air Brakes

(Continued from page 70)

to the reservoir tank for storage.

This air pressure is released by the driver when he operates the brake valve. The air then flows to the brake chambers where its energy is transformed to mechanical force and motion necessary to rotate the brake cam, which presses the shoe against the drum, delivering braking force. The braking force delivered by the brake chambers depends on the effective size of the diaphragm, and of course the amount of air the driver releases to them.

With a diaphragm with 24 square inches of effective area, five pounds of air develops 120 pounds of force, while the full 100 pounds would give an emergency stopping force of 2,400 pounds. Various sizes of brake chambers are used as certain axles on vehicles require different braking forces.

Can Vary Slack Adjustment

The slack adjuster arm which is moved by the brake chamber shaft can also be varied in length to give more or less leverage on the brake shoe cam shaft. So a wide range of braking forces is available through choice of the size of brake chambers or length of the slack adjusters.

Some compressors have their own supply of oil; others operate from the engine's oil supply. Feeder and return lines are inspected at 10,000 intervals. Mounting and drive are checked at 5,000. Breathers are cleaned as required and reservoirs are drained as individually required to keep system clear of water. Compressor unloading valve clearance is checked with feeler gauge to be within .010″ min. to .015″ max.

Pressure build-up test is made with engine running at fast-idle speed, and it is timed on requirement to raise pressure from 50 to 90 pounds. Time for this varies in vehicles, but it should not run over five minutes.

Specs and instructions of the various vehicles and brakes systems are, of course, followed in each case, but these tests are typical and for illustration purposes.

There are no great secrets about one truck or truck line passing inspections and setting enviable safety records. It is simply a case of staying on top of inspections.

with a rugged, adjustable, steel TORSION BAR

- **SIMPLE TORQUE SETTING**—torsion bar adjusting sleeve is clearly calibrated for changing torque with easy-to-use torque jig.
- **SETTING REMAINS CONSTANT**—until the adjustment is changed.
- **ELIMINATES "OVER-TORQUE"**—the torsion bar *automatically* shuts off the tool when preset torque is reached.
- **REVERSIBLE**—full power in reverse.
- **REMOVABLE TORSION BAR**—quickly converts to a standard Impactool.
- **NO CLUTCH**—to wear, slip or require adjustments.

10-337

Ask your Ingersoll-Rand jobber now for a free demonstration of this amazing Impactool in your shop!

Ingersoll-Rand
11 Broadway, New York 4, N. Y.

Originators of Impactools **AIR & ELECTRIC**

HELPFUL BOOKLETS FREE!

On this and the following pages is an excellent selection of free Automotive literature. List numbers of those desired on the coupon and mail to SOUTHERN AUTOMOTIVE JOURNAL.

101 WRITE FOR CURTIS LITERATURE ASSEMBLY KIT C-6—Gives full information on Curtis Air **Compressors**, Curtis Car Washers and Curtis Auto Lifts. Curtis Pneumatic Machinery Division of Curtis Mfg. Co., 1938 Kienlen Avenue, St. Louis 20, Mo.

102 MODEL NUMBER INTERCHANGE — Handy reference sheet with complete listing of all passenger cars by model number interchangeably with model name. Saves look-up time by including car model data not found elsewhere. Useful as a supplement to every automotive parts catalog. Kem Mfg. Co., 20-21 Wagaraw Rd., Fair Lawn, N. J.

105 WAGNER AIR BRAKE AND ROTARY AIR COMPRESSOR BULLETIN—Discusses in detail straight air and air-over-hydraulic air braking systems. Contains an explanation of the operation of the Wagner Rotary Air Compressor complete with diagrams, cross section drawings, and photographs. Lists by catalog numbers component parts as well as field installation kits. Write for Catalog KU-201. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

106 CAP MERCHANDISER — How to increase profits by use of radiator and gasoline cap merchandiser. The space saving Merchandiser saves you time and money while increasing sales and profits. Ask for detailed information. Stant Mfg. Co., 1620 Columbia Ave., Connersville, Ind.

107 THERMOID HYDRAULIC BRAKE PARTS MANUAL — A 16-page manual in simple language with illustrations. Descriptions of servicing, bleeding and flushing procedures are set forth, also instructions on rebuilding master and wheel cylinders. Brake fluid requirements are listed and hydraulic brake system operation is explained. This new manual, Form No. HBP-100 is companion piece to Thermoid Brake Service Reference Book. Thermoid Co., Dept. R, Trenton, N. J.

108 1956 EDITION OF 12 VOLT ELECTRICAL EQUIPMENT FOR PASSENGER CARS — Contains description of 12-volt automotive electrical equipment used on 1956 model cars, giving special emphasis to the new external adjustment type distributor and the enclosed shift lever type cranking motor. Recommendations for periodic servicing, checking and adjusting of the charging, starting and ignition systems are discussed. Special section devoted to trouble shooting of 12-volt electrical equipment. Technical Literature Section, Delco Remy Div., Anderson, Ind.

109 AMMCO BRAKE SERVICE, ENGINE REPAIR, AND HONING TOOLS AND EQUIPMENT — Catalogs, describing the Ammco line of brake drum lathes, brake shoe grinders, brake drum micrometers, brake shoe setting gages, brake hones, brake bleeders, brake safety checking instruments, pin fitting honing machines, small bore hones, cylinder hones, cylinder surfacing hones, ridge reamers and torque wrenches. Ammco Tools, Inc., 2110 Commonwealth Ave., North Chicago, Ill.

110 HEAVY DUTY AUTOMOTIVE AIR TOOLS — Complete details including prices on heavy duty air Impactools and accessories, tire service tools and IMPACutter. Proof of time, labor, and money savings on many automotive service jobs. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N. J.

111 SELECTION GUIDE OF SPECIALIZED LUBRICATION TOOLS—Set up in chart form covering 19 makes of cars and 8 specialized tools. Especially helpful to inexperienced operator, making it practically impossible to select the wrong gun or accessory for any given operation. Also has chassis drawing pointing out every part named. Form No. 38-808. Alemite Div., Stewart Warner Corp., 1826 Diversey Parkway, Chicago 14, Illinois.

113 TIMING LIGHT MANUAL — 20-page booklet gives full operating instructions for the three Auto-Test timing lights. Includes information about service and repair of light as well as the warranty offered by Auto-Test, Inc., 600 S. Michigan Ave., Chicago 5, Ill.

114 32 REASONS FOR OIL CONSUMPTION — an easy-to-use, indexed corrective manual listing 32 major oil consumption problems and remedies. Informative, illustrated, prepared by one of the top technical staffs in this field. Write — Oil Consumption Booklet, American Hammered, 2001 Sanford Street, Muskegon, Mich.

116 TOOLS FOR AUTOMATIC TRANSMISSION SERVICE — Tools and illustrated instructions for servicing Olds, Cadillac, Pontiac, Lincoln, Nash, Hudson, Kaiser, Frazer, Ford, Mercury and Chevrolet automatic transmissions are shown in a catalog supplement offered by Blackhawk Hand Tools, New Britain, Conn.

118 BRAKE SERVICE GUIDE — Complete instructions for inspecting, flushing and bleeding the brake system. Handy trouble check chart. Write for Bulletin HU-411. Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.

119 RAMCO SERVICE MANUAL — 5th edition. Illustrated. Gives complete data on piston ring installation—also hints on locating engine trouble—causes of oil loss—pitfalls of motor-overhauling and how to overcome. Ramsey Corp., 3698 Forest Park Blvd., St. Louis 8, Mo.

121 OIL FILTER CARTRIDGE INSTALLATION MANUAL — Gives step by step instructions for easier oil filter service on all cars through 1956. Lists crankcase capacities, tools required, plus handy cross reference chart. Wix Corp., Gastonia, N. C

122 TIRE RETRUING — An illustrated bulletin about this newest extra profit service. Describes Bear "On-A-Car" Service which makes possible tire retruing right on-the-car. Explains method using most advance truing principle. Bear Mfg. Co., Dept. SAJ, Rock Island, Ill.

123 AERO-SEAL HOSE CLAMPS — An illustrated 4-page folder giving clamp ranges, mechanical information, engineering data, stock numbers, packaging, etc. Breeze Corps., Inc., 700 Liberty Ave., Union, N. J.

125 STANDARD DUTY GENERATOR REGULATORS — A 16-page 8½ x 11 inch booklet covering the operation and maintenance of Delco-Remy regulators. (62 pictures) Contains illustrations showing various steps of adjustment. Will help automotive electricians understand and service regulators. Delco-Remy Service Department, Anderson, Indiana.

127 HYDRAULIC BRAKE FLUID SERVICE — HOW TO CHECK, DRAIN, FLUSH, REFILL, BLEED — Easy reference book that contains helpful service instructions as well as detailed descriptions and illustrations of the latest methods and procedures for profitably servicing hydraulic braking systems. Send for Bulletin HU-17H. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

129 AUTOMATIC TRANSMISSION SERVICE TOOLS — Illustrated Catalog Supplement showing us of tools for Olds, Cadillac, Pontiac, Lincoln, Nash, Hudson, Kaiser, Frazer, Ford, Mercury and Chevrolet automatic transmissions. The New Britain Machine Co., New Britain, Conn.

130 VALVE CATALOG — A new 166-page catalog of valves, valve guides, valve seats, valve openings and other valve components is offered by Rich Mfg. Corp., Battle Creek, Mich.

132 AUTOMOTIVE SERVICE GUIDE—A practical and factual presentation of the use of Impactools in automotive servicing. Contains time study reports showing how dealers and shops can increase profits for both themselves and their mechanics. Automotive Service Guides are now available for Ford, Chevrolet, Plymouth, Oldsmobile, Hudson, Studebaker and general truck service. Specify which Guides you want. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N. J.

133 CATALOG NO. 56 — Features more than 300 Champ-Items automotive replacement parts for all makes of cars. A handy service book. Champ-Items, Inc., 6190 Maple Ave., St. Louis 14, Mo.

134 STREAMLINER CATALOGS on Moog Coil action front end parts, coil springs, chassis parts and electrically heat-treated springs for cars and trucks. Moog Industries, Inc., 6651 Easton Ave., St. Louis 14, Mo.

135 WHEEL WEIGHTS — Colorful catalog describes eight types of balance weights covering 74 sizes. Also lists weight tools for application and removal of weights. Snugl Wheel Weight Mfg. Co., Kokomo, Ind.

137 DELCO - REMY ELECTRICAL SERVICE — A 20-page 8½x11-inch booklet covering essential steps in servicing the electrical system on an automobile. Profusely illustrated (84 pictures). A must for the automotive electrician. Delco-Remy Service Department, Anderson, Ind.

138 PLUG CHEK — A colorful wall banner showing condition of spark plugs under various driving conditions. This service tool is designed to assist service men in diagnosing spark plug heat range problems. The Electric Auto-Lite Co., Toledo 1, Ohio.

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140 PRESSURIZED COOLING SYSTEM Servicing and maintenance of the pressurized cooling system is detailed in a booklet available from Stant Mfg. Co., 1620 Columbia Ave., Connersville, Ind.

141 NEW PISTON RING CATALOG and full Power Story on Moog X-Plus Piston Rings for motor reconditioning. Moog Piston Ring Co., 6651 Easton Ave., St. Louis 14, Mo.

143 TRUCK SERVICE GUIDE—32-page bulletin gives the truck service shop accurate time and cost comparisons in doing a number of common service jobs by hand and with air and electric power tools called Impactools. With this guide, a truck service shop can evaluate more accurately its present service equipment and determine in advance the actual savings that it may expect through using Ingersoll-Rand air and electric Impactools. Ingersoll-Rand Co., 11 Broadway, New York, N. Y.

144 RADIATOR SERVICING EQUIPMENT—A new 48-page book "Blueprint For Profit" explains big profits servicing radiators, explains the Inland method, illustrates and describes Inland equipment, free factory training school, payment plan, etc. Inland Mfg. Co., 1108 Jackson St., Omaha 2, Nebraska.

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HELPFUL BOOKLETS FREE!

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167 **TOOL CHEST BULLETINS** — Descriptive literature of the Huot tool chests and cabinets including the Huot Porta Cab designed for you to have rolling storage for tools. Huot Mfg. Company, 587 N. Wheeler St., St. Paul 4, Minn.

168 **CRANKSHAFT GRINDER MANUAL** a colorful 8-page manual containing engineering, construction and operation details of the new Storm-Vulcan model 15-A Crankshaft Grinder It is well illustrated for easy understanding, and describes fully the special features and advantages of the new 15-A Crankshaft Grinder designed for fast production and precision. Storm-Vulcan, Inc., 2225 Burbank St., Dallas, Texas.

169 **ADVANTAGES OF FILT-O-REG COMBINATION FUEL PRESSURE REGULATOR-FILTER** — on every gasoline engine, Solves carburetor troubles caused by excessive fuel pump pressure. Explained in a new bulletin. Write Alondra Sales, Inc., 959 Crenshaw Blvd., Los Angeles 19, Calif.

173 **HYDRAULIC PARTS** — Complete master catalog of the complete line of Eis hydraulic parts. Lists and illustrates the complete line of repair kits, hoses, stoplight switches, brake-master and wheel assemblies. Information complete up to 1954. Eis Automotive Corp., Middletown, Conn.

176 **FREE SHOP AID—QUICK CHECK TIPS NO. 2** — With wiring diagrams giving pertinent information about generators, starters and regulators. Arrow Armatures Co., Dealer Service Department, P. O. Box 1428, Spartanburg, S. C.

180 **THE LAMSON NO. 56-A AUTOMOTIVE CATALOG**—Completely revised, illustrated reference book of fasteners used daily by automotive maintenance men including Plated Cap Screws and Nuts — Brass Nuts, Expansion Plugs, Assortments, Brake Lining Fasteners, Bumper Bolts, Tapping Screws, Flat and Lock Washers, Truck Wheel Studs, Stove Bolts, Cotter Pins and many other items. List prices, dimensions and carton quantities are given. Lamson & Sessions Co., 1971 W. 65th St., Cleveland 2, Ohio.

185 **SERVICE ENGINEERING BROCHURE** — A new brochure comprised of 14 Service Engineering articles covering oil consumption problems, ring problems, oil control problems peculiar to the modern high compression-high vacuum engines, piston and piston ring nomenclature and several articles on scuffed rings and how to avoid scuffing and scoring. Perfect Circle Corp., Hagerstown, Ind.

186 **AUTO LITE BATTERY SERVICE MANUAL** — An authentic reference and guide for everyone interested in testing and servicing automotive storage batteries. Simply written and thoroughly illustrated, it is so complete in its coverage of the subject that service men and fleet operators will find it easily understandable. Distributed by Auto-Lite Battery Corporation, P. O. Box 931, Toledo, Ohio.

192 **DOPE SHEET** — Tells how to get best results from Arco 45, fast air-dry enamel. Proper application methods are discussed to assure excellent product performance. The Arco Co., 7301 Bessemer Ave., Cleveland 27, Ohio.

193 **WIRE & CABLE CATALOG** — A condensed catalog of electric wire and cable, complete with specifications for all passenger cars. The Electric Auto-Lite Co., Toledo 1, Ohio.

195 **NEW CATALOG** — Material on Yankee's fender or body mounting mirror line. Locking mirror heads are featured, as well as new painted Pacesetters and 24 Karat Gold Plated Pacesetters. Ask for catalog sheets 56001-4. Kalamazoo punched for filing. Yankee Metal Products Corp., Norwalk, Conn.

197 **SPARK PLUGS** — Condensed four page specification folder for passenger cars, including 1956 models. The Electric Auto-Lite Co., Toledo 1, Ohio.

209 **EXTRA PROFITS WITH STEAM CLEANERS** — 20 page booklet showing several models of Hypressure Jenny steam cleaners, and illustrating many profitable usages of equipment in automotive and allied industries. Also folder on Cooling System Maintenance. Hypressure Jenny Div., Homestead Valve Mfg. Co., P. O. Box 348, Coraopolis, Penna.

210 **COLUMBUS SHOCK ABSORBERS** — Now available, 16 page "M.O" booklet (Method of Operation) designed to show how average dealer can make $1000 a year selling Columbus shock absorbers. Heckethorn Mfg. & Supply Co., Littleton, Colo.

213 **SHOCK ABSORBER CATALOG NO. 320-T-A** — A 16 page listing by numbers or by makes — shock absorbers for every automotive need — passenger cars, and some trucks. Monroe Auto Equipment Co., Monroe, Mich.

214 **THE WHYS AND HOWS OF VOLTAGE REGULATORS** — Explains in simple language every detail of Voltage Regulators—how they work, why they are important, how to adjust and service them. In 16-page handy pocket size edition, with many working drawings to clarify and illustrate the text. Standard Motor Products, Inc., 37-18 Northern Blvd. Long Island City 1, N. Y.

215 **LAHER CATALOG PAGE** — Both sides feature passenger car overloads and booster springs. Includes specifications and price. Laher Spring & Tire Corp., 300 Madison Ave., Memphis, Tenn.

216 **"BEHIND THE SCENES"**—Facts and figures on how heavy duty ignition parts differ from others and why they are needed. "BEHIND THE SCENES" describes how long life, peak performance are built into heavy duty ignition parts. Written in nontechnical language. STANDARD MOTOR PRODUCTS, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

219 **HOMESTEAD HOISTER** — Folder describing truck and auto front-end lifts, showing many applications of combining speed and safety. Homestead Valve Mfg. Co., P. O. Box 348, Caraopolis, Penna.

220 **1955 LASCO BRAKE SHOE APPLICATION CATALOG**—complete listing of brake shoe number, F.M.S.I number, year, make and model of automobile. Available upon request. Laher Spring & Tire Corp., 300 Madison Ave., Memphis, Tenn.

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222 **"WHAT PRICE QUALITY"** — Read how ignition parts should be made and why. "WHAT PRICE QUALITY" tells the story of the making of quality ignition parts. Written in non-technical language. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

224 **AFTER BREAK-IN DRIVING** — A 36 page booklet "After-The-Break-In" period giving technical facts on oil filter operation with illustrations. The booklet discusses oil contamination during the period after an engine is broken in. Write for "After-The-Break-In" period, Walker Manufacturing Co., Racine, Wis.

227 **FUEL PUMP TROUBLE SHOOTING** — Clearly describes and illustrates correct procedure for testing fuel and vacuum pumps, and how to use properly a fuel pump pressure gauge. Four page pamphlet also includes complete fuel pump pressure specifications and car application data. Kem Mfg. Co., 20-21 Wagaraw Rd., Fair Lawn, N. J.

230 **NEW SIOUX CATALOG NO. 56**— A new 52 page catalog including complete illustrations and descriptions of valve face grinding machines, valve seat grinder sets, electric screw drivers, impact wrenches, drills, bench and portable grinders, flexible shafts saws, sanders, polishers, abrasive discs and polishes. Also included are electric tools for builders, farmers and home shop.—Albertson & Co., Inc., Sioux City, Iowa.

232 **HADEES HEATERS, FANS, DEFROSTERS AND THERMOSTATS**— Colorful folder with description and photos of HaDees Heaters and Products. HaDees Heater Div., Gabriel Co., Rockford, Ill.

234 **SAFETY EQUIPMENT** — Miro-Flex Catalog, 8 pages fully illustrated in two colors. Gives up to date specifications of the Miro-Flex complete line of flares, mirrors, lamps and reflectors. Also catalog info on new Economy Heavy-Duty mirror line. The Miro-Flex Co., Inc., 1824 E. Second, Wichita, Kans.

236 **INSTALLATION OF SHOCK ABSORBERS** — Detailed instructions for the removal and installation of direct action shock absorbers. Stem and loop end types for both leaf and coil spring installations. Monroe Auto Equipment Co., Monroe, Mich.

237 **NEW MODEL 519 CRANKSHAFT GRINDER** — A 2 page informative bulletin just published by Lempco Products, Inc. Complete with illustrations, dimensions and reference data on this low-cost, precision crankshaft grinder with outboard counterbalancing. Write Lempco Products, Inc., Dunham Road, Bedford, Ohio.

257 **RUBBER PRODUCTS** — A condensed catalog designed for parts reference work just released. It contains handy simplified identification and illustrations of floor mats, pedal pads, motor mounts, and rubber bushings. Dean Mfg. Co., 1735 London Road, Cleveland 12, Ohio.

262 **OIL FILTER SELLING AIDS** — Wix-O-Matic the guide to extra profits in oil filter service sales. A revolutionary merchandising concept featuring minimum, controlled inventory, guaranteed sales, perpetual stock control, Dial-O-Matic cartridge selector, cartridge installation charge guide, dealer franchise, plus choice of two eye-catching, money making merchandisers—floor cabinet or wall rack. Ask for brochure giving complete details. Wix Corp., Gastonia, N. C.

263 **HAND TOOL CATALOG NO. 58M** —84 colorful pages of modern Hand Tools for all phases of automotive repair and maintenance, showing the right tool or tool set for practically every job. The New Britain Machine Co. Box 1320 New Britain, Conn.

304 **ILLUSTRATED FOUR-PAGE COLOR FOLDER** — Showing the operation and construction features of the new Storm-Vulcan Turbo Blast, a parts and motor block cleaner, with handy specification table. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 9, Texas.

305 **KOTAFIN CRANKSHAFTS INCREASES BEARING LIFE**—A new service booklet, "Stop Bearing Failures," for the benefit of users of reconditioned crankshafts. Booklet clearly shows the cause of most early bearing failures, and how the KOTAFIN process prevents them, also lengthens bearing life. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 9, Texas.

314 **WAGNER BRAKE PARTS CATALOG** — A handy ONE-POINT reference to fast-moving brake parts and lining, covering popular models of cars and trucks. Catalog also lists complete stock of shoe exchange sets as well as CoMaX bonded lining segments available to those interested in bonding lining in their own shops. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

315 **BETTER IGNITION** by Delco-Remy —16-page, 8½ x 11 inch booklet covering theory, operation and maintenance of Delco-Remy ignition equipment. Contains 71 illustrations. Will help automotive electricians understand and service ignition equipment. Delco-Remy Service Department, Anderson, Ind.

323 **BRAKE LINING** — A new 18 page condensed catalog listing brake lining recommendations for all popular passenger cars, commercial cars, etc. Vehicles are listed by year and model. Recommendations are made both for riveted and for bonded lining. World Bestos Corp., P. O. Box 346, New Castle, Ind.

336 **NEW FILKO IGNITION PARTS CATALOG** — Big 160-page catalog contains complete listings of all Filko Ignition Replacement Parts for practically every make and model of car, truck, bus and tractor. New simplified listings make the new Filko Catalog exceptionally easy to use. F. & B. Mfg. Co., 4248 W. Chicago Avenue, Chicago 51, Ill.

338 **AUTO LAMP SERVICING GUIDE** —illustrated and handy reference with replacement charts and instruction for aiming, adjusting, focusing, installing and servicing trucks and auto lamps. Also complete information on servicing directional signal flashers. Tung-Sol Electric Inc., 95 Eighth Ave. Newark 4, New Jersey.

340 **OIL, AIR, FUEL AND WATER FILTERS** — Valuable information on oil air, fuel and water filters. Complete selection of material to help you sell, install and service filters. Fram Corporation, Providence 16, R. I.

341 **SERVICE MANUAL FOR AUTOMATIC TRANSMISSIONS** — Details and illustrations for checking level and changing fluid on Hydra-Matic, Dynaflow, Power Glide, Ultramatic, Chrysler Fluid Drive and Hudson Wet Clutch. The Bell Co., Inc., 411 N. Wolcott Ave., Chicago, Ill.

345 **HYDRAULIC BRAKE WALL CHART** — Spiral bound listing up-to-date parts information for passenger cars and trucks, including listings for master and wheel cylinder repair kits, stop light switches and brake hoses. Eis Automotive Corp., P. O. Box 701, Middletown, Conn.

361 **NEW "QUICK REFERENCE" GASKET CATALOG** — Complete, easy-to find listings of Fel-Pro Gaskets for practically all makes and models of cars, trucks, tractors, buses, etc. New cataloging style makes gasket selection simple and easy. Write for your free copy today. Felt Products Mfg. Co., 1508 Carroll Ave., Chicago 7, Ill.

370 **EMEROL MFG. CO.** — Complete printed information on entire line: Marvel Mystery Oil, Marvel Inverse Top Cylinder Oiler, Hi-Rev Motor Tune-Up Oil. Shows uses, prices, description, dealer information. Emerol Mfg. Co., 242 W. 69th St., N. Y. 23, N. Y.

407 **A B C's OF SAFE PROFITABLE TIRE SERVICE**—A 24 page book just published by Bowes "Seal Fast" Corp. Complete with illustrations and how-to-do-it instructions. Outlines latest tube and casting repair techniques as well as reconditioning trade-ins for profitable resale. Bowes "Seal Fast" Corp., 147 North Pine Street, Indianapolis 2, Indiana.

410 **NEW AIR BRAKE MAINTENANCE BULLETINS** — Series of bulletins each devoted to a single unit. Fully illustrated with cross sectional, exploded and schematic drawings explaining every phase of the operation and maintenance. Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.

416 **TAIL PIPE REPAIR KIT** — A four page color catalog describing the Quaker heavy gauge, seamless tail pipe repair kit. Four sizes to fit all cars. Quaker Supreme Chemical Corp., 315 Whitman St., Montgomery, Alabama.

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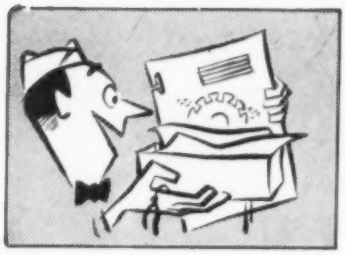


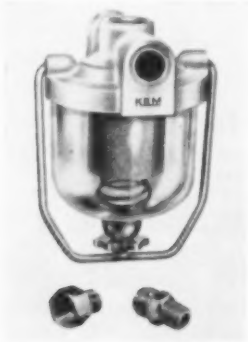
NEW PRODUCTS AND CATALOGS

(Continued from page 39)

808—Fuel Filter

A fuel filter, compact in size to allow for easy installation on all late-model engines, which can be serviced with ordinary fuel pump parts, has been announced by Kem Mfg. Co., 20-21 Wagaraw Rd., Fair Lawn, N. J.

The "Micro-Bronze" element reportedly will not crumble or shed par-



ticles into the carburetor. Water, scale and dirt cannot pass through the filter, which is easily cleaned with gasoline or ordinary solvents, it was claimed. With the filter there is no measurable pressure drop at high speeds. Correct fittings for specified car model are packed with every filter.

Want more info? Use coupon on page 102 and you will get it!

809—Micrometers

Micrometers which reportedly will handle a wide variety of measurements impossible to obtain with regular micrometers and featuring multiple interchangeable anvils have been announced by the L. S. Starrett Co., 1-121 Crescent St., Athol, Mass.

The "Mul-T-Anvil" micrometers, available in two sizes with ranges of

0 to 1" and 1 to 2" in thousandths of an inch, feature a vise-type frame which holds the interchangeable anvils. Changeover of anvils may be accomplished by placing desired anvil in the frame vise and tightening the locking screw. The micrometer can also be used as a height gauge by removing the clamping vise jaw.

Want more info? Use coupon on page 102 and you will get it!

810—Multi-Purpose Cleaner

A multi-purpose cleaner concentrate that can be diluted and mixed in varying proportions with kerosene or solvent to meet special cleaning problems has been introduced by Bendix Products Division, Bendix Aviation Corp., South Bend 20, Ind.

"Econoclene" reportedly can be brushed on, sprayed on, used in a soak tank, agitated tank or for cleaning large surfaces of metal parts, grease racks, automotive parts, lawn mower parts, bus and fleet equipment, garage floors and cement driveways.

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No. 509, 8 to 40 lbs. in 1 lb. calibrations with new, easy-reading square nylon bar

#151 Short Core

#250 Tubeless Valve

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100-120 Hinsdale St., Brooklyn 7, N. Y.

811—Short Ram

A short ram to which attachments can be added as needed for use in cramped work areas, which also has an adapter for use with any ¾" threaded tubing, or can be used as is for threadless tubing, has been announced by H. K. Porter, Inc., 74 Foley St., Somerville 43, Mass.

The "Mi-T-Mite" is a 4-ton capacity ram, 4⅞" high when retracted, with ram travel of 3¼" and an extended height of 8⅛". The connector is offset for ease in attaching when ram is on a flat surface. It fits all 3- and 4-ton jacks having ¼" "Quick Detach" couplers.

Want more info? Use coupon on page 102 and you will get it!

812—Wheel Cover

A universal wheel cover featuring deep, four-bar design and spun-buffed center has been announced by Namsco, Inc., 333 - 31st Ave., Bellwood, Ill.

The No. "4B-55P" illustrated is also available with a universal embossed design center — "No. 4B-55" — and both types are interchangeable with

original equipment on cars with standard 15" wheels. The design incorporates no-slip, no-turn, no-squeak attachment springs and comes in triple chrome plate.

Want more info? Use coupon on page 102 and you will get it!

813—Battery Chargers

A line of six- and 12-volt battery chargers comprised of six models—three portables and three wheel-mounted chargers — with complete circuit breaker protection against shorts, reversed connections and overloads, has been introduced by Allen Electric and Equipment Co., 2101 North Pitcher St., Kalamazoo, Mich.

Features of the "Tru-Charge" line include heavy-duty transformers, di-

rect air blast ventilation, full-wave selenium rectifiers and automatic mechanical timers. Tests include fast, accurate battery condition test and testing of the vehicle charging circuit, the manufacturer said. Automatic charge rate selection is also featured.

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Most complete line of wreckers—9 models 3 to 10-ton boom capacity all NEWLY DESIGNED for 1956

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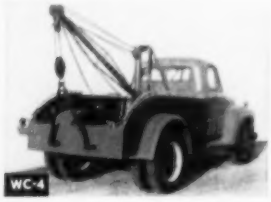
This 10-ton wrecker and the 8 and 6-ton wreckers (*shown at left*) all have twin booms that swing to either side and outriggers (*shown in* WC-6 *photo*).



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Cordomatic Clothesline Reel	220 pts.
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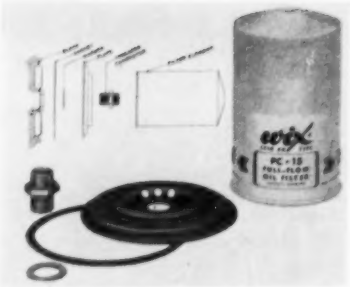
814—Oil Filter

A self-contained oil filter designed for "twist-of-the-wrist" hand installation without tools, with filter housing, cover, cover bolt, loose gaskets and oil lines eliminated for added simplicity, has been announced by Wix Corporation, Box 471, Gastonia, N. C. Many '57 cars feature this as original equipment.

A spring-loaded valve retains the sludge and old oil, preventing drainback. Other features include a lightweight, aluminum body with a grip-paint top for hand installation and removal. The "Spin-On" filter reportedly provides maximum flow rates and high microscopic particle



retention. Supplemental to it is the "WF-15" conversion with adapter which is used to simplify this as replacement equipment for all Ford, Mercury, Lincoln Continental and Thunderbird vehicles having full-flow filtration systems.

Want more info? Use coupon on page 102 and you will get it!

815—Battery Tester

A portable battery tester equipped with an extra terminal which reportedly makes direct over-all voltage readings possible for 12-volt batteries, the cell prod of which permits individual cell readings on both 6- and 12-volt batteries, has been announced by Fox Products Co., 4720 North 18th St., Philadelphia, Pa.

The "Multichek" is said to make the following tests: Per cent of charge—

over-all on 12-volt batteries, cell on 6-volt batteries; load, over-all on 12-volt batteries, cell on 6-volt batteries—showing voltage under load conditions; for good or bad battery by open-circuit cell comparison, and the electrical system which includes generator, voltage and current regulators, generator cut-off, wiring and connections.

Want more info? Use coupon on page 102 and you will get it!

816—Parking Guide

A parking guide constructed of solid plexiglas rods with adjustable stainless steel mounting brackets for mounting next to the headlamp has been introduced by Casco Products Corp., 512 Hancock Ave., Bridgeport 2, Conn.

The plexiglas rods pick up light beams which travel the entire length.

Tiny serrations in the guide at intervals along the length afford the breaks in the surface for the emergence of light. Illumination is thereby gained without bulbs or wiring, according to the company.

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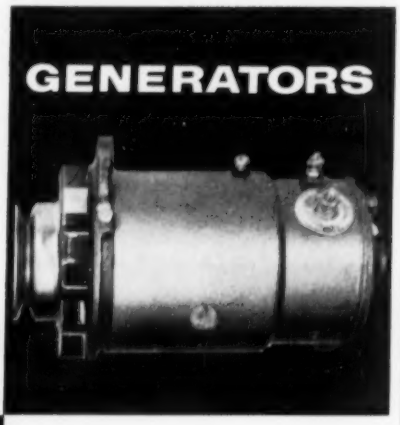

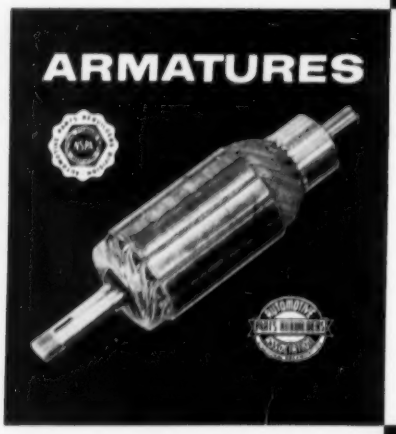

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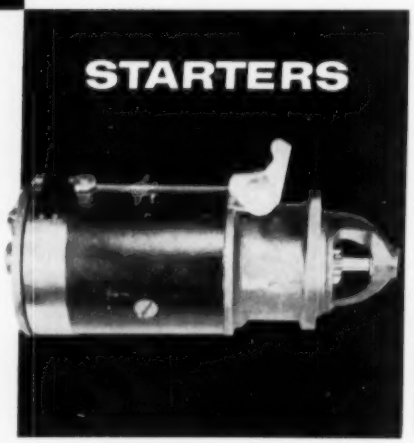
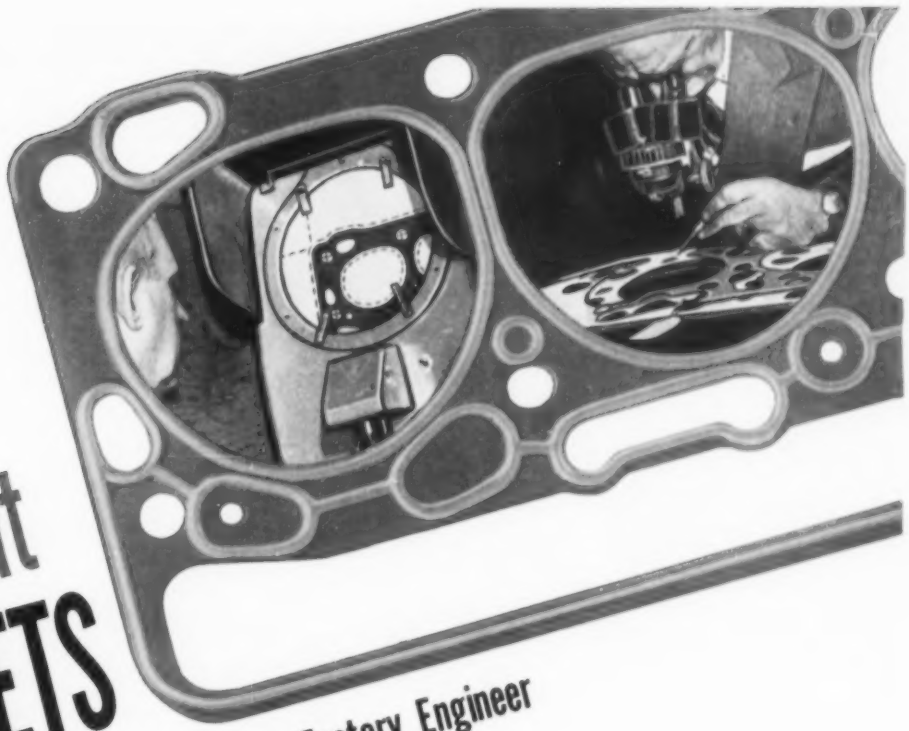
DISTRIBUTORS — CARBURETORS
CLUTCH PRESSURE ASSEMBLIES





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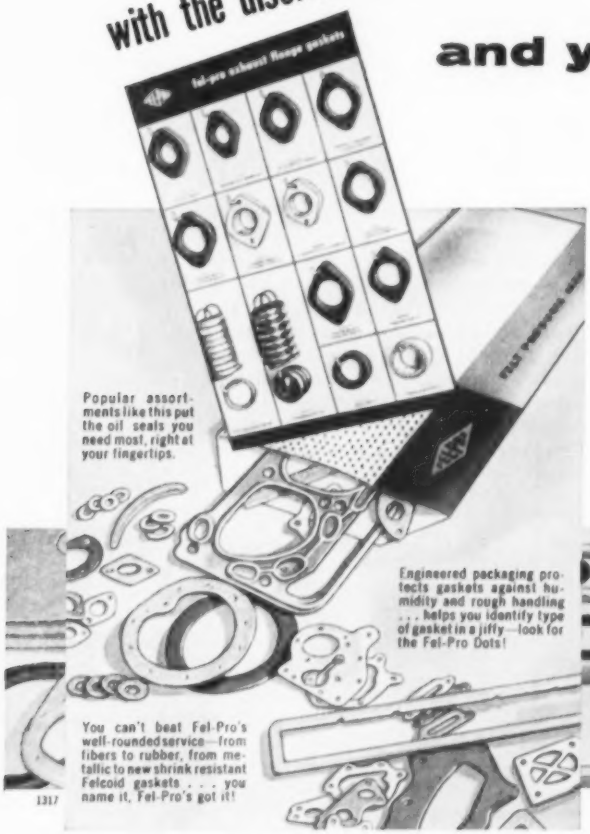
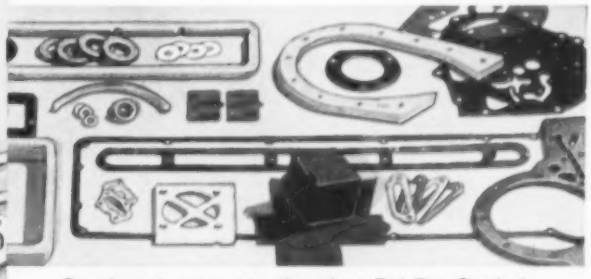


Automotive engineers know that today's higher compression engines demand more than "just another gasket." As a supplier to car factories for many years, Fel-Pro knows how to make gaskets that meet the automotive engineers' most exacting specifications for materials, pressure tolerances, specially-designed gaskets, etc. That's why, when you look at gaskets with the discrimination of a Car Factory Engineer, you're bound to choose FEL-PRO GASKETS every time! Felt Products Mfg. Co., 1548 Carroll Ave., Chicago 7, Illinois.



On almost every car, there's a Fel-Pro Gasket doing a vital sealing job!

817—Truck Jack

A truck jack which reportedly lifts nine tons with 160 lbs. jack air pressure — five tons with 100 lbs. — has been announced by Branick Mfg. Co., Inc., Fargo, N. D.

The jack is powered by regular air line inflation chuck. Valves are lo-

cated near end of long handle which enables operator to position jack, raise and lower axle without crawling under truck body, it was claimed. Handle adjusts for wheeling to work area and folds up to save space when not in use.

Want more info? Use coupon on page 102 and you will get it!

818—Battery Carrier

A battery carrier which reportedly "bypasses" the battery's terminals and firmly grips the case itself, eliminating the risk of dropping or damaging batteries and spilled acid,

has been announced by the Plews Oiler Co., 701 Seventh St., S., Minneapolis, Minn.

Made of case-hardened steel, the carrier is said to do away with any strain on the battery's posts. To assure a tight, positive hold on the battery, the user simply turns the carrier's adjustment screws and claw-like clamps grip the case tightly, according to the company.

Want more info? Use coupon on page 102 and you will get it!

819—Emergency Valve

An operator's emergency valve which reportedly enables the driver of an air tractor pulling a vacuum trailer to apply the trailer brakes regardless of failure in the air system of the tractor or other brake controls has been announced by Velvac, Inc., 3530 W. Pierce St., Milwaukee 15, Wis.

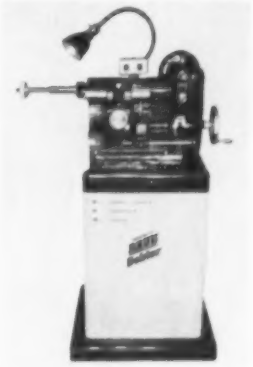
With the valve, emergency brakes on vacuum trailer can be applied by hand, released if driver wishes to move and re-applied without the driver leaving the cab, the manufacturer said.

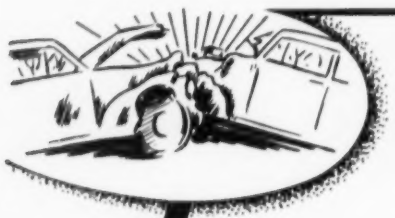
Want more info? Use coupon on page 102 and you will get it!

820—Work Light

Addition of a work light with flexible gooseneck for proper adjustment to its B-500 series "Drum Dokter" has been announced by Barrett Equipment Co., 2101 Cass Ave., St. Louis, Mo.

Want more info? Use coupon on page 102 and you will get it!





When a *body* meets a *body*, BONDO *plastic fiberglass paste*

will make it like NEW . . . quickly, easily, economically, permanently

The modern magic of this miracle filler renews, repairs and reinforces dented, rust-ridden and/or fractured metal with eye-pleasing results that make progressive body repair men forget old fashioned solders. BONDO spreads like butter, hardens like rock . . . ready to sand in 5-10 minutes with Speed-Set Hardener, 15 minutes using a heat lamp or in 30-45 minutes without either! It's rock-hard, rust-proof and permanent. BONDO, the quick-cure for "auto cancer", is a quality product made to rigid specifications under laboratory control. That's why 3 lbs. of this wonder-paste will do the work of 18-20 lbs. of solder.

Body Repairman's NOTES:

- **SAVES TIME** — No delay for solder to dry, nor for building up layers . . . apply all at once.
- **SAVES LABOR** — No special skill needed.
- **SAVES REPUTATION** — makes permanent repairs that won't shrink, crack, rust, mildew or rot EVER!

If your customer is a tourist-quickee, you'll make a friend by helping maintain his schedule; if your repair is for a neighbor, you'll keep a friend with **BONDO**, the original miracle filler that saves body specialists' time. Better buy **BONDO** at your local Jobber today.

JET ACTION Bondo

JAYCEE CHEMICAL CORP.
NORTHFORD, CONN.

"Wherever there's need for repair, BONDO should be there!"

Warehoused and Distributed by:

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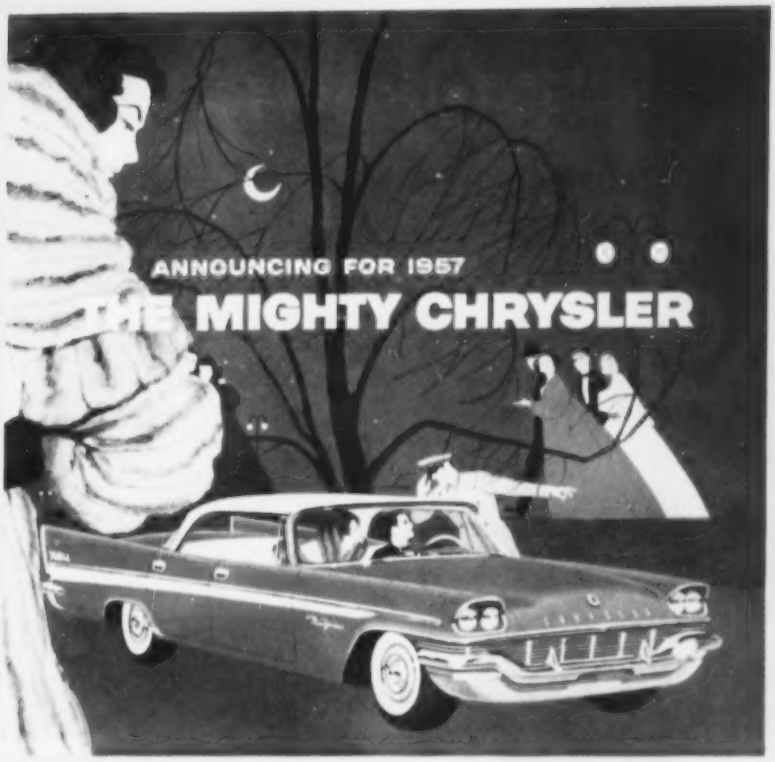
Austin, Texas Walter Tips Co. 200 Colorado St.
Amarillo, Texas Coradon E. Yates & Son 417 West Bonita St.
Norfolk, Va. Automotive Parts W'h'se, Inc. 238 West 22nd St.
Richmond, Va. David Cody & Assoc. 1805 Roseneath Road



The most glamorous car in a generation

Chrysler on-the-move presents . . .

Sweeping new advances in the dramatic Forward Look styling which so many other cars are only now beginning to copy.

New Torsion-Aire ride . . . a completely different kind of motion without lunge, lean or lurch . . . based on entirely new principles of automotive suspension.

New pushbutton TorqueFlite transmission which teams with a mighty V-8 engine developing up to 355 h.p. to give you high velocity getaway and matchless passing power when you want it.

Smaller, smarter wheels and bigger, softer tires, optional double headlights, massive glass areas and many other Chrysler advances make The Mighty Chrysler the world's most modern motor car. *Everything in it is new.* See it now at your Chrysler Dealer's.

HOMETOWN MOTORS, INC.

TO THE STAFF:

The public has seen this Chrysler announcement ad — and you've seen the cars, inside and out. You darn well know this is the greatest new car in the industry — in style, engineering, everything! Looks like a RED-HOT year for all of us lucky enough to be selling Chryslers! Best wishes for your biggest year in history!

The Boss

821—Adjustable Shelving

Shelving which can be set at almost any interval and at almost unlimited depths, allowing user to store items to the ceiling and thus conserve floor space, or without shelves can be used for tire racks or for hanging long parts or a combination of both for storage of tailpipes and mufflers, has been introduced by Walter Haertel Co., 2840 Fourth Ave., S., Minneapolis, Minn.

Component parts consist of vertical piping and adjustable brackets. The

shelving is installed with normal tools and with pipe threading or bolting, the manufacturer said. A flange is set on top of the pipe and then adjusts to fit tightly against the ceiling, fastening the pipe firmly against both floor and ceiling. Because flanges are not fastened, the shelving is easy to dismantle. Brackets are attached to the vertical pipes and horizontal pipes are set on the brackets. Plywood shelving is fastened to the pipes to complete installation. Shelf depths range from 24 to 96".

Want more info? Use coupon on page 102 and you will get it!

822—Ammeter Kit

An ammeter kit for either six- or 12-volt systems, which reportedly shows constantly the generator-battery condition and alerts the motorist or mechanic to trouble before breakdown, has been introduced by Burton-Rogers Co., 42 Carleton St., Cambridge 42, Mass.

Calibrated in the 30-0-30 amp. range for most noticeable variation,

the nickel-finish device has a bracket design for easy mounting on lower edge of instrument panel.

Want more info? Use coupon on page 102 and you will get it!

823—Radiator Tester

Improved models of its "Flo-Test" machine, which test radiators on or off the car for possible plugging and feature an instant-acting hand lever control said to be faster than the former screw-type control, have been announced by Inland Mfg. Co., 1108 Jackson St., Omaha 2, Neb.

A slight movement of the lever control reportedly adjusts the flow instantly. The large easy-reading

gauge has been repositioned so rate of flow is more visible. Hose connection has been slanted upward for easier connection to radiator. The machine is built in two sizes—"Model 25" with a capacity of 55 gallons per minute and "Model 35" with a capacity of 76 gallons per minute.

Want more info? Use coupon on page 102 and you will get it!

824—Brake Tool Carrier

A carrier with a perforated back for storage and portability of all models of its "Brake Dokters" and tools needed in the servicing of brakes, at a workable level, has been announced by Barrett Equipment Co., 2101 Cass Ave., St. Louis, Mo.

The "Roll-About" also features a tray for attachments, a circular handle and large rubber-tired wheels for ease in movement to the job.

Want more info? Use coupon on page 102 and you will get it!

825—Compressor

A compressor unit with sturdy handle and rubber-tired disc wheels which reportedly provides a dependable source of compressed air for spraying paint, coatings, inflating tires, etc., has been introduced by The Campbell-Hausfeld Co., Harrison, O.

The 2½-gallon tank is of fabricated steel and provides up to 80 lbs. pres-

sure for intermittent duty, 45 lbs. for continuous operation. Cooled by a large fan-type compressor pulley, the compressor displaces three cubic feet per minute with 2¼" cylinder bore and 1¾" stroke.

Want more info? Use coupon on page 102 and you will get it!

826—Angle Screwdriver

An electric angle screwdriver which reportedly will drive or remove wood screws, self-tapping screws, lag screws and machine screws and nuts has been announced by Albertson & Co., Inc., 3100 Lowell Ave., Sioux City, Iowa.

The screwdriver is offered with a positive or adjustable clutch which

provides a free spindle for engaging bit with screw. Operating pressure closes the clutch and continues to drive until the resistance is greater than the hand pressure. Where uniform tightness is desired, no matter how much pressure the operator applies, an adjustable clutch is offered which operates the same as the positive clutch, except that driving force is predetermined by adjusting the spring load for the desired tightness. The angle design makes work in close quarters possible. Equipped with a reversing switch, the screwdriver will remove as well as drive screws.

Want more info? Use coupon on page 102 and you will get it!

Arvin

PRICED TO GIVE YOU AN EDGE ON CLOSE DEALS!

Hot Water Car Heaters

Both 12 and 6 volt sizes—Simple to install

Universal Recirculating Heater-Defroster—Compact, perfect fit for 'most all cars and trucks—new and old

A heater with a stout heart that gives peak performance any time, anywhere.

Its great core has 2800 sq. in. of radiating surface in a 6 x 8 x 2½" honeycomb design. Complete change of water every 2 seconds at normal driving speeds. The king-size, 8-blade, 7-inch fan moves 150 cu. ft. of warm air per minute. Circulates *all* the air in car or truck cab every 2 minutes.

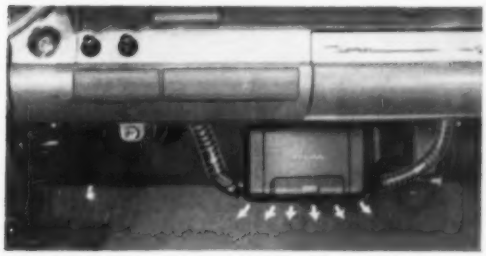
Space-saving shape and size fits small or odd-shaped spaces. Sensational low price gives you a trading edge on close deals, a profit edge on good deals.

Much lower priced than car-factory heaters!

List price only $34.95

Liberal Dealer Discount

NOTE *Both the Arvin "20" and the Arvin "55" are available in 6-volt size for models prior to 1956 that have 6-volt electric systems.*



Arvin Series "55"

Pressure Forced Heat and Defrosting

AS A FRESH-AIR HEATER—the Arvin "55" fits '55 and '56 Ford* and Chevrolet passenger cars. High-speed impeller *pressure-forces* big heat volume within seconds throughout the car and to the defroster. The large core refills with hot water every 2 seconds. Fast, easy installation.

LIST PRICE ONLY $44.95

Defroster, with Fresh Air Kit, $9.95 extra. *Liberal Discount*

AS A RECIRCULATING HEATER—the Arvin "55" fits Plymouth as well.

**1956 Ford without radio*

Arvin FIRST IN CAR HEATERS SINCE 1921

See your Arvin distributor • Arvin Industries, Inc., Columbus, Indiana

827—Bead Loosener Shoes

Bead loosener shoes, designed to work on the new 14" rims as well as the conventional sizes and to replace loosener shoes on the "D-D" model "Tireman" changer, have been introduced by Coats Co., 3001 Fifth Ave., S., Fort Dodge, Iowa.

A slight modification of the "Tireman" bead loosener shoe was said to be all that was necessary to adapt it for the 14" wheel, and it is said to work equally well on all other sizes of passenger-car and light-truck tires, whether of tubeless or conventional type.

Want more info? Use coupon on page 102 and you will get it!

828—License-Taillight

A double-duty license- and taillight reportedly made to fit any model car and designed to complement the long lines of newer cars and foreign models, has been announced by Alco Division, Auto Lamp Mfg. Co., 2909 South Indiana Ave., Chicago 16, Ill.

The "No. AL 152" combination light comes with a red lens which acts as a taillight and a clear lens underneath illuminates the license plate. A companion lamp is the "No. AL 151" which has only the clear lens pointed down at the license plate. Both models are available with or without license mounting bracket for

either six- or 12-volt systems and feature a chrome-plated lamp body with waterproof, dust-proof and vibration-proof construction, it was claimed. Each license light is individually packed complete with 2-filament 21-3 cp bulb, connector plug and necessary parts for installation.

Want more info? Use coupon on page 102 and you will get it!

829—Socket Set

A ½" square drive socket set, thin walled for work in close quarters and with chrome-plated finish, in a specially designed metal compartmented box, has been introduced by Snap-on Tools Corp., 8028 28th Ave., Kenosha, Wis.

The set includes 11 deep or bolt clearance type double hexagon sock-

ets from ½" to 1⅛" wrench sizes by sixteenths; 18 standard double hexagon sockets from ½" to 1¼" wrench sizes by sixteenths; six single hexagon "Flexockets" with wrench openings of 9/16" to ⅞" by sixteenths; one 10" long ratchet handle; one ratchet adaptor, one 18" long nut spinner; one 15" long sliding "T" handle; one universal joint; one 19½" long speeder, and three extension bars, 2", 5" and 10" long.

Want more info? Use coupon on page 102 and you will get it!

830—Safety Flasher

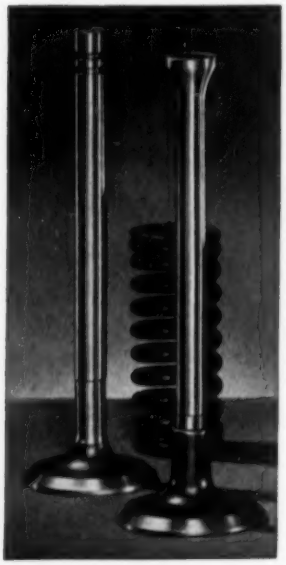
A safety flasher which makes warning lights on school buses flash on and off independently of the candlepower or wattage of lamps being flashed has been announced by Macchi & Co., 819 Valencia St., San Francisco 10, Calif.

It reportedly will flash one, two, three, four or any combination of lamps up to six amperes without matching flasher to load. Also, if it wears out, it still gives protection by continuing to burn warning lamps with steady light, it was claimed. Available in either fast or slow flash, it is hermetically sealed and rubber suspended in heavy-gauge plated brass tubing which is non-rusting, oil-, vapor-, water- and dust-proof, the manufacturer said. Heavy coin silver contact points reportedly give steady, dependable performance.

Want more info? Use coupon on page 102 and you will get it!

exciting

JOAN COLLINS
co-starring in MGM's
"THE OPPOSITE SEX"
in CinemaScope and Color



for thrills in motor performance...install

Manley
valve parts

Airchrome VALVES, SPRINGS, GUIDES—and TIMING CHAINS

Manley Valve Corporation, 15th St. & Fairmount Ave., Philadelphia 30, Pa. *Supplier to leading original equipment manufacturers.* District Sales Representatives: Lawrence M. Hirsig Co., Jacksonville; J. S. Connell Co., Dallas.

Announcing

The SILOO MILLION DOLLAR SPECTACULAR!!

FREE

WITH ONE CASE (24 CAN) ORDERS

ANY RCA VICTOR LONG PLAY OR EXTENDED PLAY RECORD ALBUM

THE MOST-GLITTERING PERSONALITIES OF THE ENTERTAINMENT WORLD

Your Choice of More than 125 Best-Selling Albums

PERRY COMO
EDDIE FISHER
EARTHA KITT
EDDY ARNOLD
THE THREE SUNS
CHARLIE BARNET
SONS OF THE PIONEERS
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SAUTER-FINEGAN ORCHESTRA
ARTHUR RUBINSTEIN
ARTURO TOSCANINI
BOSTON POPS ORCHESTRA
ROBERT SHAW CHORALE
SIGMUND ROMBERG
GLENN MILLER
MARIO LANZA
HARRY BELAFONTE
VOICES OF WALTER SCHUMANN
ROBERT MERRILL
PATRICE MUNSEL
FRANKIE CARLE
LEOPOLD STOKOWSKI
NBC SYMPHONY ORCHESTRA
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ETC., ETC., ETC.

All Nationally Advertised at $3.98 and $2.98 . . . YOURS FREE!

HERE'S HOW THE DEAL WORKS: Buy only one case of HYDRA-VALVE KLEEN (24 cans) OR one case of TRANSMISSION KLEEN (24 cans) OR one Duet Case (12 cans of each product). A Dealer Bonus Certificate plus an RCA catalog is packed in each case. Each certificate entitles you to any RCA VICTOR Record Album—ABSOLUTELY FREE OF CHARGE! Now, if you don't own a record player and would like to start a record library, send us two certificates plus $10 and we'll ship you a THREE-SPEED RECORD PLAYER that has an established retail value of $29.95!

This is your opportunity to build a record album library of the world's greatest music—the world's greatest artists—all on the RCA VICTOR label—all at absolutely no cost to you. There is no limit to the number of albums you can bring home to your family. No matter what your taste in music is, you'll find the albums of your choice in this RCA VICTOR catalog.

This is the most exciting, the most unique, the most unusual giveaway of the year! Start collecting your albums today so that you and your family can enjoy this fine entertainment for years to come!

CALL YOUR JOBBER OR WRITE FOR DETAILS

SILOO HYDRA-VALVE *KLEEN*

A very specialized product for a very special problem. Keeps hydraulic valves in perfect condition. Quiets noisy operation. Stops sticking valves and rings. Frees lifters.

SILOO TRANSMISSION *KLEEN*

An exclusive development. Added to regular transmission fluid, it smooths out transmissions . . . eliminates creepage, hesitation and between speeds lurching. Miscible with all transmission fluids.

PETROLEUM SOLVENTS CORPORATION, Dept. J, 331 Madison Avenue, New York 17, N. Y.

831—Battery Charger

A portable plug-in-type battery charger for operation with 6- or 12-volt storage battery systems in 4-, 6- and 10-ampere capacities, by plugging into cigarette lighter receptacle, has been announced by American Television & Radio Co., 300 E. 4th St., St. Paul 1, Minn.

Want more info? Use coupon on page 102 and you will get it!

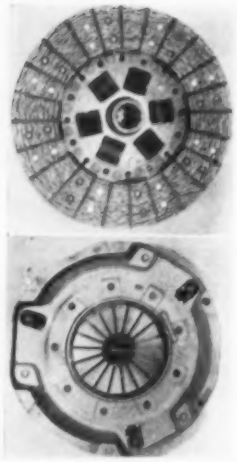
832—Muffler Catalog

A catalog containing the latest muffler and tailpipe specifications for passenger cars and light trucks, including 1956 models, plus complete information on the application and installation of dual exhaust systems and an easy-to-use index, as well as fully illustrated sales and merchandising tips, has been published by The AP Parts Corp., 1801 Spielbusch Ave., Toledo 1, O.

Want more info? Use coupon on page 102 and you will get it!

833—Rebuilt Parts

A rebuilt clutch plate (top) and clutch pressure assembly (bottom), both said to be precision rebuilt, matched, balanced and tested, have been announced by Kimco Auto Products, Inc., 1520 Texas St., Memphis, Tenn.



Rebuilt brake shoes, featuring bonded lining, special bonding agent, full molded lining and perfect shoe alignment, have also been added by the company, as well as generators rebuilt in every detail, according to the company's announcement.

Want more info? Use coupon on page 102 and you will get it!

834—Mirrors

Mirrors designed for cars with the "new low look" and said to fit the fender or body of any standard car or those with wrap-around windshields have been introduced by Yankee Metal Products Corp., 25 Grand St., Norwalk, Conn.

Available in three models, the mirrors are said to be constructed of non-

corrosive material with brass mirror head and die-cast body finished in copper, nickel and chrome. The heads can be locked in permanent position and the non-glare mirror glass is guaranteed not to streak or cloud, the manufacturer said. The mirror mounts on a concealed mounting plate.

Want more info? Use coupon on page 102 and you will get it!

835—Upholstery Cleaner

A spray upholstery cleaner which reportedly will clean upholstery, leather, vinyl, leatherette or canvas by just spraying on and wiping off has been announced by Tempo Products Co., 6515 Carnegie Ave., Cleveland 3, O.

Want more info? Use coupon on page 102 and you will get it!

• $1,000,000 WORTH BOUGHT IN 1955!

LEMPCO'S 545

FASTEST SET-UP EASIEST-TO-OPERATE

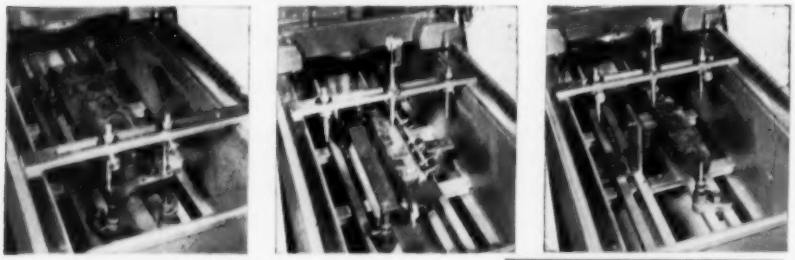
WORK IS ALWAYS VISIBLE—FACE-UP

MEASURE STOCK REMOVAL WITHOUT REMOVING WORK

HUGE COOLANT FLOW; GRINDS COLD...AND TRUE

USE LEMPCO'S TIME-PAYMENT PLAN...WRITE TODAY FOR DETAILS

THE ONLY HEAD GRINDER DESIGNED TO HANDLE ALL '56 Y-BLOCK HEADS!



LEMPCO PRODUCTS, Inc., Bedford, Ohio

Gentlemen: Send me all information and prices on your New "545" Automatic Wet Surface Grinder.

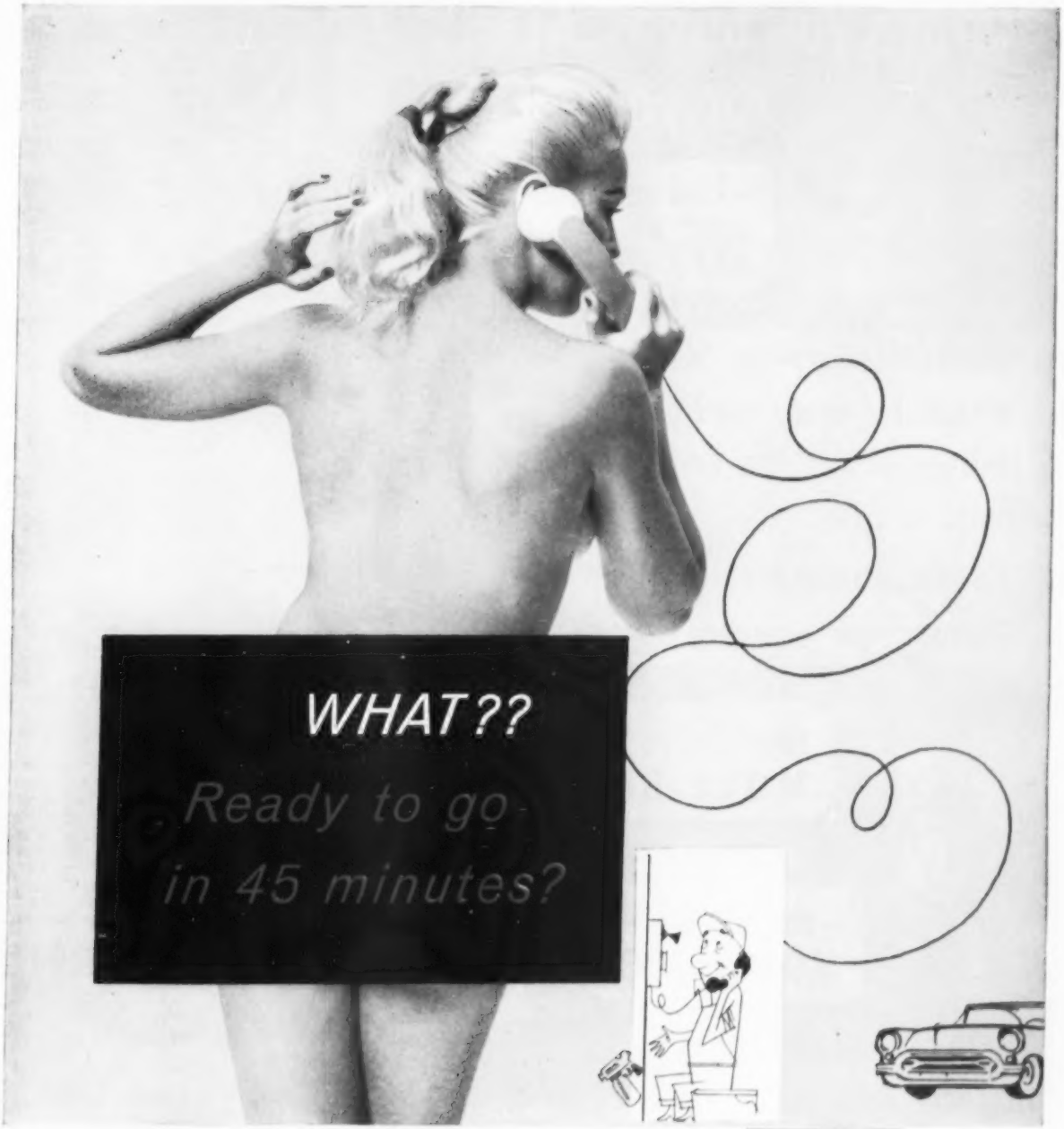
Name _____ Title _____

Company _____

Address _____

LEMPCO

for 35 years . . . a leading builder of machine tools.



YES! Better-than-ever **Arco 45** quick-drying automotive enamel:

- ★ air dries for **delivery** in 45 minutes.
- ★ available in most popular '57 car colors.
- ★ will not wrinkle or waterspot.
- ★ can be taped within 3 hours for two-toning.
- ★ can be recoated if necessary, using **Arco 45 Sealer.**
- ★ weathers like baked enamel.
- ★ retains gloss without waxing or polishing.

Arco PAINTS
TESTED FIRST TO LAST!

THE ARCO COMPANY • 7301 Bessemer Avenue • Cleveland 27, Ohio

Before you buy HEATERS for your FLEET

—find out about HāDees

there is an easy- to-install model for every need—or, HaDees will engineer units to your specifications and assure satisfactory performance.

they'll give you MORE heat

—and SAVE YOU MONEY, TOO.

For Example:

Model H-555, designed for easy installation, distributes heat throughout entire cab by three individually adjustable controls. Windshield defrosting regulated by easily reached control on top of heater.

Write for facts about the

Hottest Heater Deal

FOR FLEET OPERATORS

HaDees Heater Division of the Gabriel Company · Rockford, Ill.

836—Battery Tester

A battery tester, small and compact in size, which can be hooked on to present charger and which reportedly can test any 12-volt battery in a single operation, requiring about 10 seconds in all, has been announced by Christie Electric Corp., 3410 W. 67th St., Los Angeles 43, Calif.

The unit automatically compares 3 cells of a 12-volt battery against the

other 3 cells in a sensitive bridge-circuit, the manufacturer said. The degree of unbalance between cells is registered on the dial "Good" or "Bad."

Want more info? Use coupon on page 102 and you will get it!

837—Car Washer

An all-purpose car washer, shipped assembled and ready for installation, with which one man reportedly can wash 27 to 60 cars a day, with car ready for delivery in ten minutes, has been announced by Wohlert Corp., 708 E. Grand River Ave., Lansing 5, Mich.

In operation the spray moves around the car automatically, making

a complete circuit in 2½ minutes at middle speed. Three speeds can be used — 1½-, 2½- and 3½-minute cycles. The spray of water is so controlled that it does not impede the work of the operation as it washes away dirt and rinses. Three trips around the vehicle is all that is needed for an efficient wash job, according to the manufacturer.

Want more info? Use coupon on page 102 and you will get it!

Jim Millsap (right) of Herman-Brownlow Co., Moog Jobber in Springfield, Mo., introduces Bill Traugott.

MEET BILL TRAUGOTT
at your Moog Jobber's Front-End Clinic

If you are interested in more "under-the-car" business, Bill Traugott has a money-making message especially for *you!*

Bill is a real front-end expert, having spent almost 40 years working on the rack. He is also an inventor and holds patents on several popular front-end parts.

Bill Traugott's clinic is loaded with practical tips you'll take back to your shop and start using immediately.

And when Bill speaks about the dependable quality, close tolerances and easy installation of Moog Chassis and Suspension Parts, he speaks from *experience.* He was just a youngster in the years following World War I when he first started to use Moog Parts, and they have been his choice ever since.

As manufacturers of the *most complete* line of "under-the-car" parts, Moog has an important stake in the future of front-end and alignment shops. Bill Traugott's clinics are just one of many services offered by Moog to help garagemen build their businesses.

To find out how Moog can help *you,* see your Moog Jobber. And be sure to meet Bill Traugott when he appears in your city. Moog Industries, Inc., St. Louis 14, Missouri.

MOOG
A GREAT NAME IN AUTOMOTIVE MAINTENANCE

means more "under-the-car" business!

838—Removing Tar on Acrylics

A method for diluting its "Taroff" road tar remover so that it will not harm the new acrylic body finishes introduced this year, which are soluble in aromatic hydrocarbons, has been announced by Permatex Co., Inc., P. O. Box 1, Brooklyn 35, N. Y.

For automobiles with an acrylic finish that have been on the road six months or more, the company's research chemists recommend dilution of "Taroff" with kerosene in equal proportions. On cars less than six months old, one part "Taroff" to two parts of kerosene is recommended.

Want more info? Use coupon on page 102 and you will get it!

839—Truck Canopy

A protective canopy for pickup trucks which reportedly can be put on or taken off by one man in a few minutes, offering user complete cargo protection, has been announced by Truk-Tarp Co., 9217 Weiss St., Dallas 19, Texas.

The frame is of 14-gauge, rust-resistant channel steel. The canopy of heavy, double-filled duck—mildew- and waterproofed—is reinforced at points of greatest wear, it was claimed. The standard color is olive drab. A model is also available, at a slight additional cost, in Air Force dark blue, which is also flame-proofed. The canopy is held down on the sides by zinc-plated springs attached to the body of the truck and to the bottom of the canopy. These springs maintain a constant, predetermined tension on the canopy to insure a snug fit under all weather conditions.

Want more info? Use coupon on page 102 and you will get it!

840—Adjusting Tools

Two special Powerflite adjusting tools for reverse band and kickdown band adjustments, said to be simple in operation with trouble-free torque mechanisms, pre-set according to the manufacturer's specifications to make proper adjustments automatically, have been announced by The New Britain Machine Co., New Britain, Conn.

The reverse band adjusting tool (top) can be used with the transmis-

sion either in or out of the car, while use of the kickdown band adjusting tool (bottom) does not even require removal of floor board or access cover. The manufacturer reported these tools are part of the continuing development of a complete line of Blackhawk automatic transmission adjusting tools.

Want more info? Use coupon on page 102 and you will get it!

841—License Plate Frames

License plate frames available in gold finish or heavy chrome plate, with or without a plastic window, have been introduced by Auto Lamp Mfg. Co., 2909 South Indiana Ave., Chicago 15, Ill.

The license plate is secured by 4 clips into the frame, which is said to be easy to install in a few minutes. Each individually packaged frame comes complete with mounting screws.

Want more info? Use coupon on page 102 and you will get it!

DOUBLE YOUR PROFITS

with the

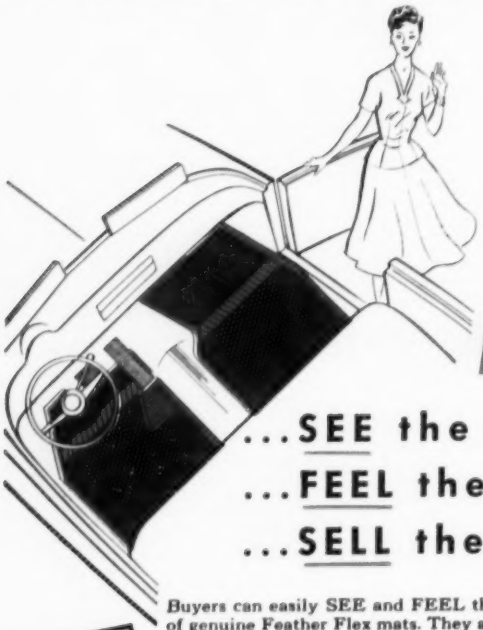
Feather Flex

QUALITY

MONKEY GRIP

TRIM-FIT TWIN

CAR MATS



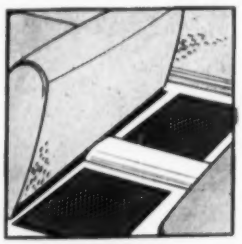
...SEE the difference

...FEEL the difference

...SELL the difference

Buyers can easily SEE and FEEL the higher quality and beauty of genuine Feather Flex mats. They are made from all-new rubber and wear for years without losing their shape or color brightness. Exclusive accelerator heel rest ribs provide comfort and safety. Special non-skid base prevents sliding—keeps mats in place. Other quality features make Feather Flex mats the line for greater profit.

ATTENTION JOBBERS RETAILERS SERVICE STATION OPERATORS



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Designed for either front or back seat floor areas. Matching colors. Sizes for perfect fit.

No matter what brand of "price leaders" you handle, you make greater profit on quality merchandise. Here are the BETTER QUALITY AUTO MATS in which buyers can SEE and FEEL the difference.

Sold through Automotive Jobbers everywhere. Catalog sheets and sales literature available.

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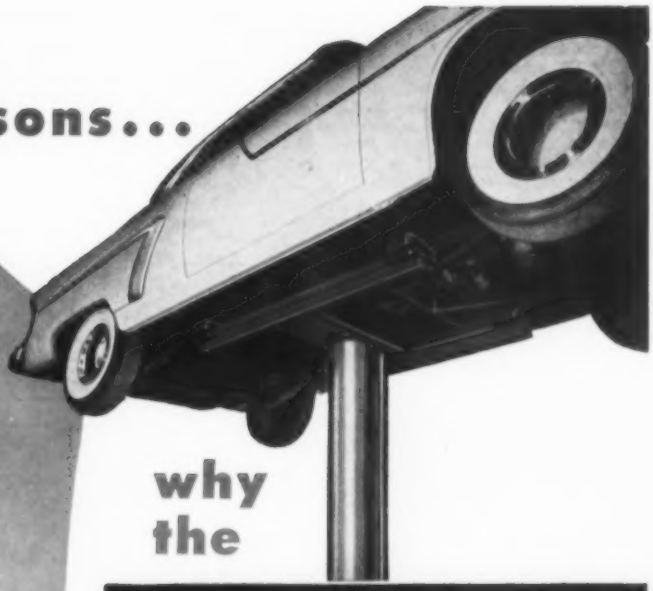
8 reasons... why the Curtis all-purpose single post FRAME LIFT



1

COSTS LESS TO BUY—LESS TO INSTALL

...than *any* type of two-post lift.

2

FASTER, EASIER UNDER-CAR SERVICE

...up it goes swiftly, smoothly on its highly polished plunger—up to 67" if needed.

3

MAXIMUM ACCESSIBILITY

...*everything* you need to reach is at your finger tips—for inspection—for adjustment—for greasing—for removal and replacement.

4

RELAXES SPRING SUSPENSIONS

Frees bearings—Permits full grease penetration at lower pressures—less time required per fitting, therefore quicker lubrication jobs.

5

CLEAR FLOOR SURFACE

Permitting unrestricted use of servicing equipment. No recess in floor to catch dirt.

6

EASY SPOTTING OF CAR

Two-position wheel dishes permit proper positioning of both long and short wheelbase cars, permitting easy "spotting" and safe pick-up.

7

WHEELS HANG FREE

Facilitates tire changes and rotation, re-packing wheel bearings, brake work, installing and removing chains.

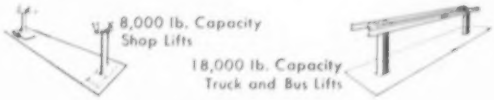
8

102 YEARS OF ENGINEERING RESEARCH

...that's what it amounts to—Because Curtis has been engaged in successful manufacturing experience since 1854.

puts extra money in your pocket

Anything you do to speed up shop work increases your volume—therefore your profits. This all-purpose single post Frame Lift does just that—helps speed up shop work through greater accessibility. See your Curtis jobber or write for bulletin BGS-6.



Remember you can COUNT on... OUR 102nd YEAR

Curtis

MANUFACTURING CO • PNEUMATIC DIV. • 1938 KIENLEN • ST. LOUIS, 20 CM-2

842—Polishing Set

A polishing set in a mobile 24" x 14" x 16" steel cabinet, equipped with wheels and a handle and with ribbed rubber feet to prevent slipping, which can be used as a step-up for polishing car tops, has been announced by Albertson & Co., Inc., 3100 Lowell Ave., Sioux City 3, Iowa.

The polish set includes a heavy-duty portable electric polisher, polishing pads, rubbing pads, polish, wax, pad cleaning tool, wash mitt and rubbing compound. It is said to be complete polish equipment and supplies for polishing in all its phases.

Want more info? Use coupon on page 102 and you will get it!

843—Muffler Regulation Book

A folder containing muffler requirements as specified by the 48 states and the District of Columbia, including specific muffler requirements for 78 cities with populations over 100,000, may be obtained from Merit Mufflers, 619 Smith St., Toledo 7, O.

Want more info? Use coupon on page 102 and you will get it!

844—Pin-Fitting Machine

A pin-fitting machine said to bore holes parallel to crankpin bore of rod with less effort and in less time than previous models has been announced by Cedar Rapids Engineering Co., 902 - 17th St., N. E., Cedar Rapids, Iowa.

The features that reduce working time are the rod and piston holding devices which work independently yet use the same spindle and tool setup, thus eliminating interchange of fixtures. The boring tool is set to size directly from the pin with a

micrometer adjustment for clearance or press fit. The fixed boring spindle is vertically mounted on precision bearings and sealed against dust and chips, it was claimed. Three-fingered centering is designed to hold the rod true and square with crankpin hold.

The "RM-100" also allows for examination, measurement and gauging of bored bushing without unclamping or removing the work from the machine. The feed system is hydraulic with fingertip control. Tools are lapped on a diamond lapping disc, and special jigs are included for tool sharpening.

Want more info? Use coupon on page 102 and you will get it!

845—Upholstery Cleaner

A foam-type liquid upholstery cleaner in a squeeze bottle with brush attached, which reportedly removes dirt and conditions leather, plastic and fabric car upholstery, has been introduced by Laitner Brush Co., 2000 Brooklyn Ave., Detroit 26, Mich.

Said to be especially designed for the job, the brush is attached directly to the squeeze bottle. The captive-type cap is leak-proof so that the refillable unit may be stored in the glove compartment, the manufacturer said.

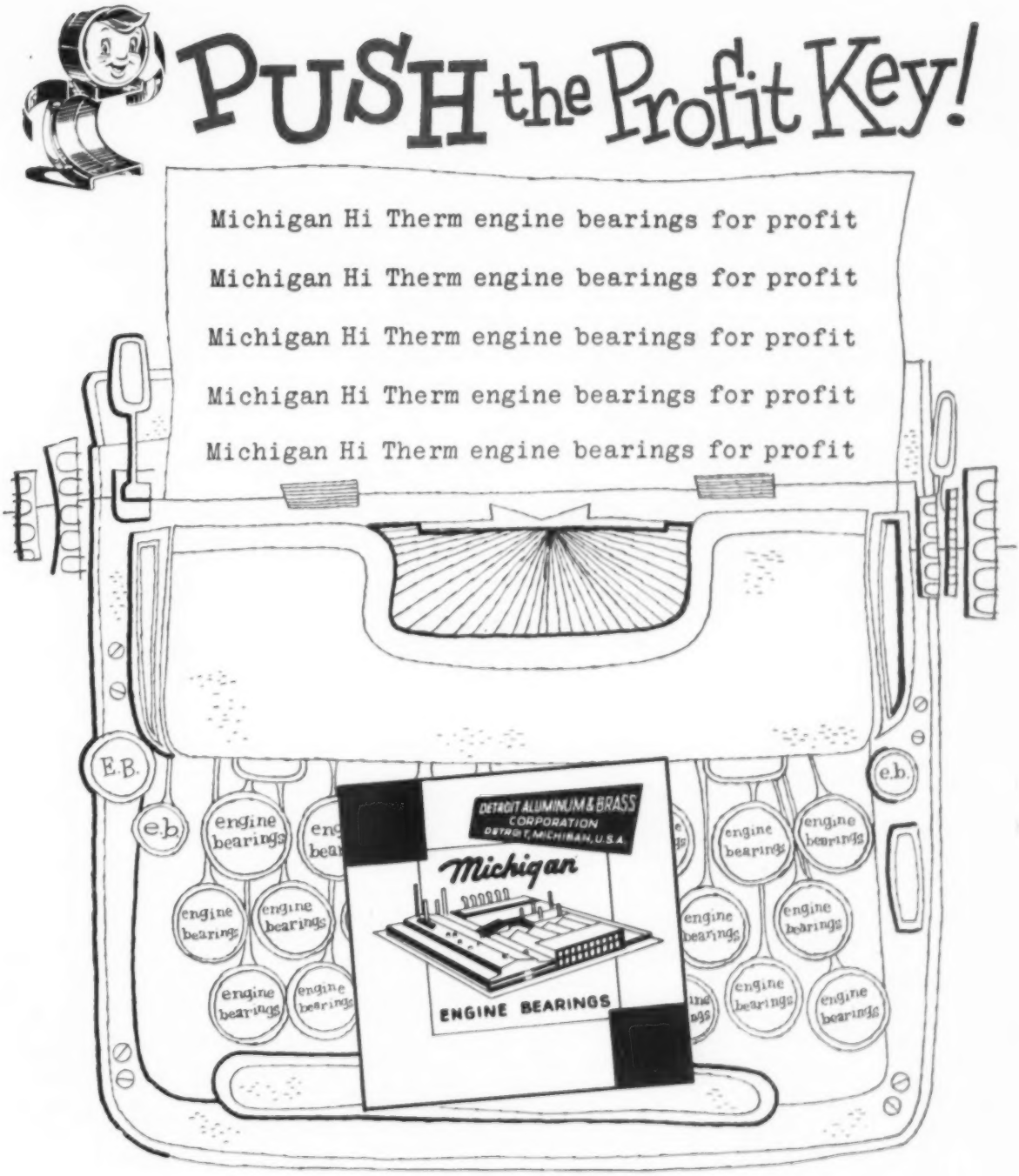
Want more info? Use coupon on page 102 and you will get it!

846—Plastic Wire

Heavy #8 and #10 gauge duplex plastic primary wire for marine use, color-coded with one conductor brown and the other red, with an over-all chrome-colored plastic jacket, has been announced by Belden Mfg. Co., 4647 W. Van Buren St., Chicago 44, Ill.

The wires are insulated and jacketed with a special moisture-proof vinyl plastic compound said not to be affected by salt or oil.

Want more info? Use coupon on page 102 and you will get it!



In your sale of engine bearings for replacement, there's only one key to profit—MICHIGAN HI THERM. Make us prove it.

DETROIT ALUMINUM & BRASS CORPORATION

DETROIT 11, MICHIGAN

MANUFACTURERS OF ENGINE BEARINGS FOR ORIGINAL EQUIPMENT SINCE 1925

847—Battery Cables

An assortment of 12-volt battery cables designed to give dealers complete battery cable replacement coverage, with minimum investment, for all cars and trucks having 12-volt systems, has been announced by The Crescent Co., Inc., 20 Central Ave., Pawtucket, R. I.

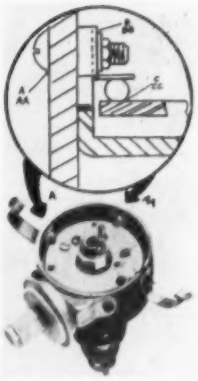
Packaged in a combination shipping container and display box, the assortment consists of 12 12-volt battery cables of the following lengths: 9, 15, 20, 23 and 43", and one cable each of 30 and 38". The cables have lead-alloy pressure-die-cast terminals to eliminate corrosion and are equipped with the company's patented steel insert, plus a shell-type lug which makes them easier to install in tight spots, according to the company.

Want more info? Use coupon on page 102 and you will get it!

848—Breaker Plate Kit

A kit reportedly offering a simple, inexpensive method of stopping the lift or tilting of the upper plate of a Delco-Remy "center bearing" distributor breaker plate has been introduced by the Igniter Co., 1635 El Camino Real, Redwood City, Calif.

Installing the "Breaker Plate Stabilizer" kit guarantees a constant, evenly spaced spark occurrence, resulting in smoother engine performance, smoother idling, increased power and doubling the life of ignition points, the manufacturer said. No machine work is necessary. The only requirement is to change two of the original screws and installation takes 12 minutes whenever the distributor has been removed to change contact points or to be overhauled.



Want more info? Use coupon on page 102 and you will get it!

849—Screw-Lock Insert

A screw-lock insert which reportedly not only eliminates lock-washers, lock-nuts and locking wires but also provides strong, permanent, wear-resistant threads in light metals, plastics, steel and cast iron, has been introduced by Heli-Coil Corp., Shelter Rock Lane, Danbury, Conn.

Because the "Mid-grip" insert requires no more boss diameter or wall thickness than a conventional tapped thread, it can easily be incorporated into an otherwise frozen design, it was claimed. It reportedly exerts a strong locking effect on a screw fastener because one or two coils in the middle of the insert are generally octagonal instead of being perfectly round. As the screw passes through this area, the gripping coils are forced to assume a circular shape. The chords of the "circle" press on the screw, giving the locking effect which is not diminished through many cycles of disassembly, the manufacturer said. The locked screw may be freed by applying break-away torque approximately the same as used in the original assembly. No special tool is required to seat the gripping coils.

Want more info? Use coupon on page 102 and you will get it!

850—Flag Ornaments

Confederate flag ornaments molded of high quality metals and finished with triple-plated chrome, packed one to a card on a self-selling display, have been announced by Nibur Mfg. Co., Inc., 20 West 22nd St., New York 10, N. Y.

No drilling, bolting or tools are needed to affix the three-dimensional 4" x 1¾" flag to an automobile, bike, motorcycle, luggage, etc. A strong adhesive backing holds it permanently to the object.

Want more info? Use coupon on page 102 and you will get it!

KNOWS THE SCORE . . . EARNS MORE!

UPPED HIS EARNINGS WITH ROCHESTER TRAINING

Car owners want an *expert's word* when carburetors are involved. *Your* shop can become carburetor headquarters whether the problem's jets or floats . . . pistons or plungers!

That's why the absolutely free Rochester Training Course, given by GM and UMS experts, means more customers, more money, for you. And as a Rochester specialist, you'll handle *all* your work more efficiently . . . even veteran mechanics can boost their output as much as 40%. What's more, Rochester parts and kits help make your repair jobs easier! There's a kit for every job, with *just* the parts and gaskets you want. Precision-built Rochester Carburetors are standard equipment on Cadillac, Buick, Oldsmobile, Pontiac and Chevrolet.

WRITE TODAY for full details on the free Rochester Training Program: Service Department, United Motors Service Division, General Motors Corporation, GM Building, Detroit 2, Michigan.

There's a GM Training Center near you!

GM PARTS SALES

Over 15,000,000 cars on the road are equipped with

ROCHESTER CARBURETORS

ROCHESTER PRODUCTS DIVISION OF GENERAL MOTORS CORP., ROCHESTER, N. Y.

851—Hole Saw

Shatterproof, heavy-duty hole saws reportedly designed to cut clean, round holes from 9/16" through 6" diameter in any machinable material up to 1⅛" thick, including steel, brass, bronze, cast iron, etc., have been announced by The L. S. Starrett Co., 1-121 Crescent St., Athol, Mass.

The saws are recommended for use with portable power tools with ½"

or large chucks and on machine tools such as lathes, drill presses and radial drills. Double welding combines a high-speed steel cutting edge with an extra-tough, shatterproof body welded to a rigid steel cap threaded to accommodate interchangeable arbors. Arbors are available with ½" or ¾" hexagon shanks and also with a ¼" round shank. A ¼" high-speed steel pilot drill is incorporated into each.

Want more info? Use coupon on page 102 and you will get it!

852—Washer Additive

An automatic windshield washer additive recommended for all-season use by the manufacturer and said to be solvent, detergent and anti-freeze has been announced by Cristy Chemical Corp., Worcester, Mass.

One ounce of "Clear-Glass" added to the water jar reportedly makes a difference in cleaning road film, bug splatter, etc. For cold-weather driving two ounces added prevents freezing and damage to the water jar, the manufacturer said.

Want more info? Use coupon on page 102 and you will get it!

853—Carburetor Booklet

A 46-page revised, pocket-size edition of the "Know Your Carburetor" booklet, which tells in easy-to-understand language exactly how a carburetor works, listing common carburetor troubles and how to correct them and emphasizing the importance of care and regular cleaning, has been published by Pennsylvania Refining Co., 2700 Lisbon Road, Cleveland 4, O.

Want more info? Use coupon on page 102 and you will get it!

854—Lubricant Pump

A high-pressure, air-operated lubricant pump said to pump off the top of lubricant in 400-lb. drum, eliminating channeling and aeration, has been announced by Gray Co., Inc., 1042 Sibley St., N. E., Minneapolis 13, Minn.

The "Topper" reportedly seals lube from dust, dirt and other contaminants, completely evacuates drum, pumps all new, multi-purpose greases at low temperature, retains original density of lube and gives greater volume and velocity at point of application with easy eye check of lube level.

Want more info? Use coupon on page 102 and you will get it!

855—Tar Remover

A tar remover formulation reported to be safe for use on the recently introduced acrylic lacquer finishes has been announced by E. I. du Pont de Nemours & Co., Wilmington, Del.

Harry R. LaTowsky, manager of the company's specialties sales section, said, "A competitive manufacturer said recently that to the best of his knowledge no tar removers had been developed that did not have harmful effects on acrylic lacquer finishes. The fact is that Du Pont has been marketing 'Dissolvo' tar remover since last February, and it is entirely safe."

The product is sold as one of the items in the company's No. "7" line under the trademark "Dissolvo" and is said to be safe not only for the new finishes but for use on conventional finishes as well.

Want more info? Use coupon on page 102 and you will get it!

856—Instrument Gauge

An instrument gauge designed to save time and trouble in locating the source of cooling system difficulties has been introduced by B*K Service Products, 1454 East 19th St., Indianapolis 7, Ind.

It is said to be an accurate, dependable instrument for testing the pressurized cooling system itself in addition to the radiator cap. The gauge dial has large, easy-to-read markings vertically positioned in plain sight. Pressure ranges and test points for each cooling system are clearly marked and color-coded. Other features include a manually-operated valve to release pressure from system, a die-cast aluminum body, steel latching ears and a heavy-duty pump.

Want more info? Use coupon on page 102 and you will get it!

857—Valve Lifter Remover

A hydraulic valve lifter remover which reportedly removes stubborn lifters from the top of the engine, without pulling the camshaft, has been announced by Herbrand Division, The Bingham-Herbrand Corp., 1111 Stone St., Fremont, O.

An inverted collet locks in a snap-ring groove for a straight line pull, eliminating twisting, turning, prying and damage to the lifters, the manufacturer said.

Want more info? Use coupon on page 102 and you will get it!

858—Transmission Kits

Automatic transmission parts and repair kits for Dynaflow, Flight-O-Matic, Ford-O-Matic, Hydra-Matic, Merc-O-Matic, Powerflite, Powerglide, Studebaker, Turbo-Drive and Ultramatic have been introduced to the trade through NAPA jobbers by MicroTest Gear Co., Indianapolis, Ind. The catalog carries clear and specific listings on all parts and kits, plus an interchange list of car-manufacturer-to-MicroTest part numbers.

Want more info? Use coupon on page 102 and you will get it!

859—Tire Shampoo

A self-emulsifying, self-scouring solvent, one application of which reportedly cleans an entire wheel, has been announced by The Curran Corp., South Canal St., Lawrence, Mass.

The shampoo is applied by pouring a small amount on a damp sponge, wiping it on the tire and hosing off. Harmless to rubber, it reportedly does not evaporate, is economical to use and leaves white sidewalls new in appearance.

Want more info? Use coupon on page 102 and you will get it!

860—Muffler Catalog

A muffler catalog, divided into two sections for faster reference and more compact size, containing pertinent information for salesmen and dealers in one section and numerical and specification data in the other, with all listings corresponding with car factory nomenclature and parts numbers, has been published by Walker Mfg. Co. of Wisconsin, 1201 Michigan Blvd., Racine, Wis.

Want more info? Use coupon on page 102 and you will get it!

861—Safety Device

A safety device, the basic unit of which is a hydraulic electrical switch that registers the motion of the automobile through the driveshaft, has been announced by Auto-Mate Corp. of America, 18228 Parthenia St., Northridge, Calif.

Through a specially-designed check valve, "saf-T-brak" reportedly con-

trols the energy the driver has put in the braking system. This energy, having been sufficient to stop the automobile, is therefore sufficient to hold it after it has stopped, regardless of its position—up or down hill, or on level, it was claimed. Stored-up energy is released by depressing the accelerator. Car will not "creep" at intersections at full stop, the manufacturer said. The device is automatic, with no buttons or switches.

Want more info? Use coupon on page 102 and you will get it!

(More New Products on page 128)

Just what is an "adjustable" shock absorber?

In one sense, *every* first-quality shock absorber made today is "self-adjusting." Because, today, virtually all shocks incorporate spring-actuated valving. *Within a pre-calibrated range of control,* these spring-loaded valves compensate for varying hydraulic demands created by road and load conditions. In that sense, *all* Gabriel shock absorbers are "adjustable," and have been for years.

But it was not until Gabriel perfected and marketed the AjustOmatic that you could offer your customers adjustable ride control —in a choice of three ranges.

The Gabriel AjustOmatic is different from any other shock absorber on the market today.

You can, in less than a minute, select and set for every customer *his kind of ride*—for his kind of car and his kind of driving. YOU do the adjusting: "soft" for ultimate comfort, "medium" for greater stability than with standard equipment, "firm" for utmost stability.

There is a ready, steady market for adjustable shock absorbers today. Don't be misled into giving your customers something less! Ask your Gabriel jobber for new fact folder giving full details.

MAKE $30-$40 A DAY! Get a new, Gabriel Shock Tester. Tie in with powerful national advertising featuring AjustOmatics this month. Show the need—sell the deal!

Gabriel
AJUSTOMATIC

THE ONLY GENUINE ADJUSTABLE SHOCK ABSORBER

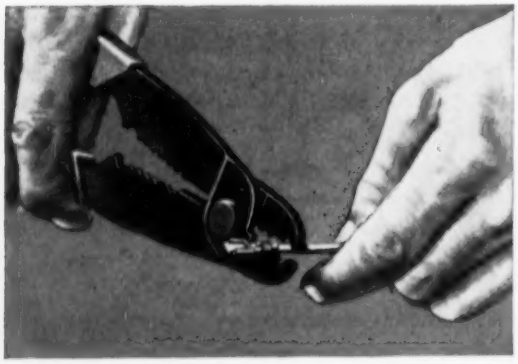
© 1956 The Gabriel Company

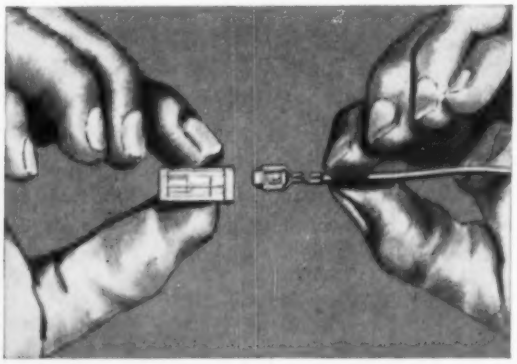
Make fast, easy wiring repairs on late model vehicles

- *Twenty-four items for wide service coverage*
- *All parts are identified*
- *Application data included*
- *Handy case has space for crimping pliers*

Packard Electric's 4004 Snap Fast connector kit contains original equipment parts used on over half of all the automotive vehicles produced today. The compact kit is sectionalized to keep parts separate and readily available without confusion. And it's built strong, for long wear.

The new Packard Electric connectors are all easily attached with terminal crimping pliers. They make quick, easy repairs and give you factory-type push-together connections that don't shake loose in service. Order a kit from your jobber today. It's another Packard exclusive, designed for your profit.





Look how easy it is!

Instruction sheet identifies the proper part. Terminals go on quickly with crimping pliers. Terminal then slides easily into insulator and connector is ready to snap on. Job finished!

with new . .

Buy the line of wiring easiest to stock

and install . . . **Packard Electric**

Warren, Ohio

GM PARTS SALES

"Live Wire" division of General Motors

RED HEAD *Heaters*

EASY-TO-INSTALL E. A. RED HEAD HEATERS for one car ...or a fleet!

Let the RED HEAD control the weather! There's a full line of RED HEADS to fill your needs... and special units can be engineered to your specifications.

Get MORE heat... MORE dollar savings!

Rely on: RH-50 "Super Heat" hot water heater. In 6 or 12 volts. Designed for efficient recirculating, heating, and defrosting. Has high quality copper and brass radiator core, trouble-free powerful motor. Excellent for cars equipped with Underseat heaters. Easy to install, dependable, and highly effective.

WRITE FOR DETAILS ABOUT THE

RED HEAD *Heater* DEAL

E. A. HEATERS

E. A. Heater Division of the Gabriel Company, Rockford, Illinois

More New Products

(Continued from page 124)

862—Mechanical Jacks

Three ratchet-type mechanical jacks, two bumper and one frame lift, have been introduced by Blackhawk Mfg. Co., 5325 W. Rogers St., Milwaukee 46, Wis.

"Model J-3" lifts from the side and reportedly fits all cars. Twin bases and rack bar are one piece and lifting saddle remains vertical during its operation. The jack has a ton capacity and comes with a removable curved 18" lug wrench handle which locks in place for foot operation.

The ton capacity models "J-4" and "J-5", zinc and cadmium plated, respectively, are built to lift any model car designed for bumper lifting, it was claimed. Both have rustproof rack bars and oversize safety bases which are easily removed for compact storage, the manufacturer said. "Model J-5" has a self-adjusting lifting hook which "form-fits" any model car. Two - point contact prevents bumper damage.

Want more info? Use coupon on page 102 and you will get it!

863—Windshield Sealer

A liquid windshield sealer which can be cleaned up with a dry rag has been announced by Minnesota Mining and Mfg. Co., 900 Fauquier St., St. Paul 6, Minn.

The product is said to have excellent filling qualities, to remain pliant regardless of climatic conditions and to have "invisible black" color against the rubber moldings of windshields and backlights.

Want more info? Use coupon on page 102 and you will get it!

864—Prepaint Cleaner

A prepaint cleaner for removing wax and silicones from automobile, bus, truck and trailer bodies before repainting has been introduced by Permacel Tape Corp., New Brunswick, N. J.

The product reportedly cleans by dissolving oil, grease, wax silicones and gummy substances. At the same time, it microscopically etches the surface so the new paint will bond properly, the manufacturer said.

Want more info? Use coupon on page 102 and you will get it!

"No car on the road handles like this Dodge!"

PROVING GROUND REPORT NO.

1

Torsion-Aire Ride

'Way outside Detroit, there's a guy who drives a new '57 Dodge —and all its competitors—around and around a brutal course. It's loaded with curves, hills, soft gravel, chuck-holes, and bumps.

This is test-driver Dick Schanz. And what does he say these days?

"I'm not kiddin'—no car on the road handles like this Dodge. When you turn a corner, you *know* you're going 'round that corner. And I mean 25-30 miles an hour faster than I can take them with other cars. Its lower center of gravity and new suspension snug it into the road. When I take her down a stretch, I just set back. These torsion bars keep it straight as a string.

"And its ride relaxes you. It's like settin' home in a chair. It's really fun to go out and drive it!"

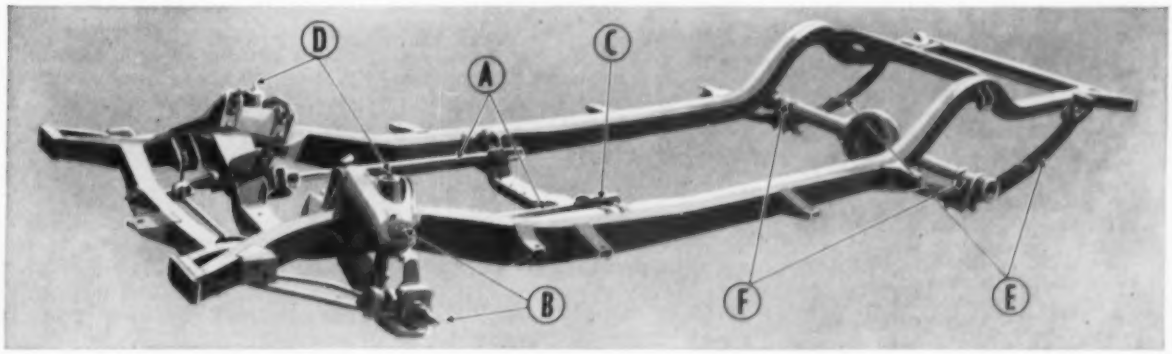
Dick's talking about dramatically new Torsion-Aire Ride. Why not drop over to your Dodge Dealer's and try this ride yourself?

Step into the wonderful world of Autodynamics

SWEPT·WING

'57 Dodge

There's a lot to revolutionary Torsion-Aire Ride. (A) Torsion-bar springs up front, most efficient automotive springing ever devised. Driver Schanz has deliberately tried to crack Dodge torsion bars and has given up. (B) Completely new ball joints give better steering "feel." (C) Manual device to adjust car height. (D) New-valving shock absorbers flatten roads. (E) Outboard-mounted rear springs minimize body roll and "lean" on curves. (F) Rear axle mounted forward on rear springs to absorb torque. And there's much more, too: Anti-brake dip mountings. Larger tires with more rubber and air to soak up road noise and shock at its source. "Live rubber" wherever suspension system meets the frame.



865—Storage Batteries

A complete line of storage batteries for truck, bus and diesel applications, a total of 16 types — from ½-ton pickup trucks to 50-ton off-highway equipment — has been announced by Willard Storage Battery Division, 246 East 131 St., Cleveland, O.

Two "Super Master" 6-volt types, designed for medium-heavy truck and commercial use, are built with the company's grid alloy which reportedly resists battery-killing overcharge and undercharge. Life of these batteries is said to be increased through the use of the company's exclusive plate anchor which secures plates, preventing damage and deterioration. Twelve "Heavy De Luxe" types feature grids of "Metalex," the company's patented grid alloy that reportedly combats grid deterioration.

Want more info? Use coupon on page 102 and you will get it!

866—Hydra-Matic Manual

A 156-page manual covering the diagnosis, repair and adjustment of Hydra-Matic transmissions, prepared by the Lincoln Technical Institute of Newark, N. J., and issued by the National Automotive Parts Association, Fox Building, Detroit 1, Mich., is available to the trade through NAPA jobbers. The manual is durably bound to withstand handling in the shop and indexed by tabs at the bottom of the guide listing trouble symptoms.

Want more info? Use coupon on page 102 and you will get it!

867—Chrome Protector

A spray chrome protector guaranteed to stop rust and corrosion on automobiles and at the same time provide protection for chrome, nickel, copper, brass, aluminum and silver against rust has been announced by Tempo Products Co., 6515 Carnegie Ave., Cleveland 3, O.

The clear protector reportedly is simple to spray on and can easily be removed with gasoline or household solvents.

Want more info? Use coupon on page 102 and you will get it!

868—Degreasing Fluid

A concentrated self-emulsifying degreasing fluid for use on both gasoline and diesel engines and for cleaning undercarriages of buses, parts tools and garage and service station floors has been introduced by Permacel Tape Corp., New Brunswick, N. J.

For most applications the degreaser is cut with 8 parts kerosene or light fuel oil. This mixture is sprayed or brushed on the surface to be cleaned and hosed off with water after about 20 minutes. The entire solution reportedly emulsifies and flows off in a milky color.

Want more info? Use coupon on page 102 and you will get it!

869—Steam Cleaner Handbook

"Steam Cleaner Handbook for Auto Laundries," a 40-page guide to the selection, use and maintenance of steam cleaners by car wash operators covering what size cleaner to use and how many, installation and maintenance schedules, scale and its prevention, plus ideas for increasing revenue on slow days, and including several helpful charts and installation photographs, has been published by Malsbary Mfg. Co., 845 92nd Ave., Oakland 3, Calif.

Want more info? Use coupon on page 102 and you will get it!

870—Rain Diverter

A device for all cars with squared-corner ventilator windows, said to prevent rain from draining into the car when windows are open, has been announced by The Servwell Products Co., 6541 Euclid Ave., Cleveland 3, O.

Clipped on each right and left vent window, the "Rain Catch" reportedly also prevents foggy inside windows by enabling the driver to keep vents open. No tools are needed for installation.

Want more info? Use coupon on page 102 and you will get it!

How to Skin Prospect

(Continued from page 37)

put his name on top of the building. When he feels that he has run the gauntlet, he put signs all over the building "This Dealership Is Under New Management." He even changes the name of the dealership.

He has a complete sucker list, so he sends a letter to each one of them, telling him that he is the new owner, that he has understood that the previous owner has not always treated the customer fair, that he had understood that this particular customer had been mistreated in the dealership, wants him to know that he is there to make amends for any wrong that had been done, even at a terrific loss to himself. The same procedure then starts all over again with the same group of victims.

In recent years there has been considerable conversation about the systems, and there are several different systems in operation. The system that I have just described to you is the D-M-T system—Deceptive, Misleading Thievery. Now the hard-hitting ethical dealer must have a system also.

The only one that I know to recommend is the one advocated by Mr. Stanley Marcus, president of Neiman-Marcus Co., Dallas. This system is known as the triple S system—Showmanship, Salesmanship, Service.

Showmanship in advertising, showmanship in display, showmanship in manpower. Salesmanship, honest selling in advertising, salesmanship in display, salesmanship in manpower.

Be sure that your advertising is a real service to the people who read your ads, that your display is a service to your community by making your part of the community a more attractive place to be seen and, above all, see that your manpower is doing a real service to your customer.

I have heard it said that it takes a different caliber man to sell and service a $195 used car than it does to sell and service Lincoln Continental, Cadillac Eldorado, or Chrysler Imperials. In my opinion it takes just as high caliber man to sell and service *successfully* the $195 used car as it does to sell and service Lincoln Continental, Cadillac Eldorado, or Imperial.

To operate successfully on the triple S system, a great deal of another S, *sincerity*, should be intermingled with the other three.

Beating Deceptive Ads

Strongest competition I know against deceptive advertising is to build a sales force which does not depend on advertising as its only source of prospects, and when that sales force has been built, demand from them a truthful representation of the dealership, the product and, above all, the deal, thereby creating a sincere confidence between the dealer, salesman and customer. A salesman cannot be a hard-hitting, ethical salesman unless he can speak of his dealer in a most complimentary manner, nor can a dealer be a hard-hitting, ethical selling dealer unless he can speak of his factory in a most complimentary manner.

I like my factory. I have a brand-new district manager. He is a new resident of Texas just from Tennessee. I think he is one of the finest persons I know, and I know a lot of fine persons. I make this statement for two reasons: One is I thought he would be here today, and the other is if this isn't hard-hitting, ethical selling, then Dale Carnegie taught me wrong.

Now, I have described to you two systems. I will mention just one advantage of the triple S system. All dealers in a community, a city, a state, or a nation can use it. It is impossible for over two dealers, at most three, in one community to use the Deceptive, Misleading Thievery system.

Both systems will sell cars in volume, and at profit. Now if you do not have either in effect, it is impossible to use a little of one and a little of the other. We, the dealers of Texas and dealers of America, have a definite choice to make.

Monmouth*

MICRO* AND CLEVITE* 77 BEARINGS...

you can't install greater engineering, precision and performance!

Monmouth bearing qualities can back up your desire to provide the finest of engine repair service. Why? Because they are the product of the world's leading manufacturer of automotive engine bearings . . . and you benefit by the most advanced bearing engineering and bearing manufacturing techniques known today.

You can quickly get Monmouth Micro or Clevite 77 bearings that are precisely right for any car, truck, bus or tractor. Available from N. A. P. A. jobbers coast to coast.

*The words Monmouth, Clevite and Micro are registered trade marks of Clevite Corporation.

Monmouth

TRADE MARK

ENGINE BEARINGS

Clevite Service
The Cleveland Graphite Bronze Co.
Division of Clevite Corporation, Cleveland, Ohio, U. S. A.

NAPA
Assurance of Quality

Your NAPA Jobber is a Good Man to Know!

Plymouth's New Wheelbase

(Continued from page 47)

Fury 301 is 8.5 to 1. Plaza V-8 compression remains at 8 to 1. The compression ratio of the Power-Flow Six (132hp at 3,600) is increased from 7.6 to 1 in 1956 to 8 to 1 in 1957.

Other innovations in the 1957 line include:

14" wheels and low pressure, large section tires.

New 11" brakes, of Chrysler Corp.'s Total-Contact design.

A new integral all-weather air-conditioning system which combines heating, cooling, dehumidifying and ventilating in one underhood unit, available on all V-8 models.

Padded instrument panel and sun visors available as optional equipment.

New safety recessed center steering wheel.

New full-view windshields with 45% greater glass area in sedans and Suburbans and 43% greater in hardtops.

A new line of Suburban station wagons with many advanced features, including a rearward-facing third seat in nine-passenger models, roll-down tailgate window, wrap-around quarter window, torsion bar tailgate hinge, optional inside concealed luggage compartment with lock on all six-passenger Suburbans and a fuel tank mounted in left rear fender.

As in the 1956 offering, Plymouth for 1957 offers four lines of standard automobiles. Belvedere is the top line, Savoy the middle and Plaza the lowest-priced. A two-door hardtop is available in the Savoy line and both a two-door and four-door hardtop are available in the Belvedere line.

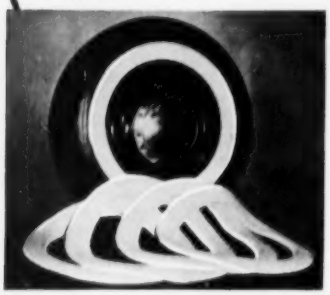
Suburbans again in 1957 make up a distinct line of cars, in three groups — De Luxe, Custom and Sport — and in 12 models taking into account two-door and four-door models, and six-passenger and nine-passenger bodies, and V-8 and six-cylinder models.

Fuel capacity of the various models is 20 gallons, with 23 gallons optional.

LOOKING for SOMETHING NEW?

TYRE-TRIM new style White Rubber Sidewalls with TAPERED FEATHER EDGE

Cannot Be Distinguished From An Original Whitewall Tire.



First line white sidewall — one high quality at low, competitive prices!

- FULLY GUARANTEED
- FIRST LINE ONLY
- WILL NOT DISCOLOR
- NO RECLAIMED OR SYNTHETIC RUBBER
- NO TRADE NAMES OR MARKINGS ON FACE OF PRODUCT
- 14," 15" & 16" SIZES

SELL MORE— MAKE MORE WITH TYRE-TRIM

SETTING SALES RECORDS EVERYWHERE

THOUSANDS SOLD TO TIRE AND AUTO DEALERS

TAKE ACTION NOW: Write for catalog sheet and complete price schedule.

TYRE-TRIM CORPORATION
951 BERGEN STREET • NEWARK 12, N. J.

First Show in Five Years To Be Staged at Miami

THE first Miami (Fla.) automobile show in five years will be staged Dec. 15-20 at the Dinner Key Auditorium, under the auspices of the Miami Automobile Dealers Association.

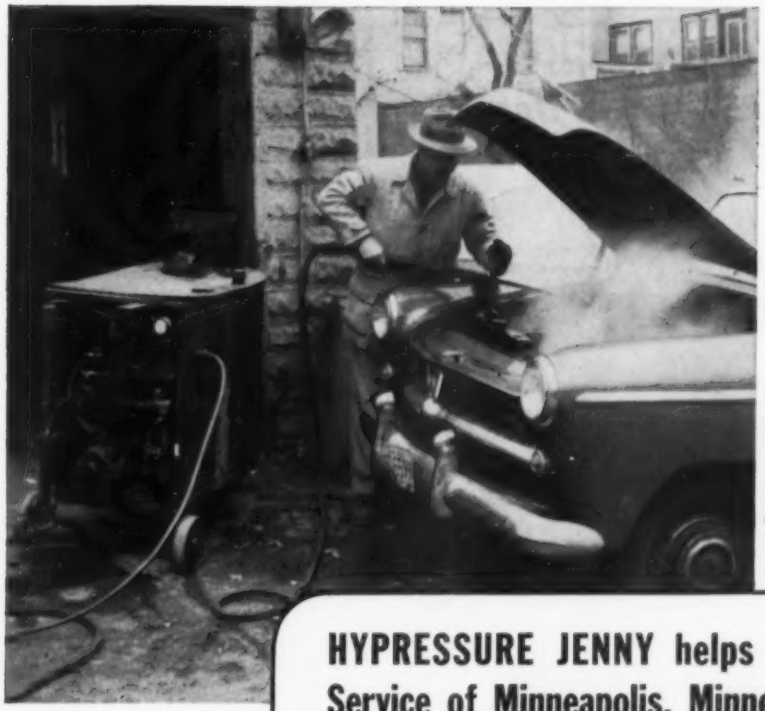
"The Great American Car" will be the theme of the event, which will mark the 30th anniversary of the Miami association in collaboration with the Biscayne Boulevard Association, also celebrating its 30th year.

Thirty years of progress in the manufacture of the automobile will be climaxed by the unveiling of all the 1957 models, including numerous foreign makes.

The 400,000 square feet of exhibitor space allocated for the show will include a limited number of qualified accessory dealers.

Tennesseans Set Dates

The annual convention of the Tennessee Automotive Association will be held at the Peabody Hotel, Memphis, May 26-28, Executive Vice-President David P. Whelchel announced last month. The association has been meeting in the fall. Some associations have changed to spring dates to avoid any possible conflicts with new-model showings.



New Series "1250" Jenny

HYPRESSURE JENNY helps Evan's Auto Waxing Service of Minneapolis, Minnesota net over $2000 a year from engine cleaning alone...

Mr. Burt Evans
Owner and Manager
Evans Auto Waxing Service

Mr. Evans, who specializes in appearance reconditioning of used cars for dealers, figures that half of his total volume comes from engine cleaning which he considers equally important with waxing in appearance reconditioning. Hypressure JENNY makes it possible for him to handle nine cars an hour compared with only one car every forty-five minutes by a former cleaning process.

With an estimated net profit of $40 a week from engine cleaning alone, Mr. Evans says, "I consider JENNY very satisfactory. I couldn't get along without it."

This is impressive testimony to the profit-making possibilities of Hypressure JENNY, not to mention the time and labor saving involved.

If you'd like us to send you full particulars on how Hypressure JENNY Steam Cleaner can be put to work earning *more profits* for you . . .

MAIL THE COUPON TODAY!
There is no obligation

HYPRESSURE

Jenny

STEAM CLEANER

Mail this coupon TODAY...

Please send full information on
☐ **Hypressure Jenny** ☐ **Jobber Time Payment Plan**

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Company _____
Address _____
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HYPRESSURE JENNY DIVISION
HOMESTEAD VALVE MANUFACTURING COMPANY

P.O. BOX 99 *"Serving Since 1892"* CORAOPOLIS, PA.

Kentucky's Economic Growth Cited By Finance Executive to Dealers

Excerpts from an address by O. C. Jordan of Louisville, Ky., vice-president of Universal C.I.T. Credit Corp., before the annual convention of the Kentucky Automobile Dealers Association at Louisville Nov. 12.

IN OUR state of Kentucky, 156,000 persons are employed, directly or indirectly, in automotive industries. This amounts to about one person out of every 6.5 gainfully employed in the state, as against a national ratio of one in 7. New industries are continually coming in and manufacturing payrolls are showing large increases, which is an extremely bullish sign for the state economy. In 1955 the payrolls registered a 17% gain, *fourth highest* of any state in the country. Only the District of Columbia, Arizona and Montana registered greater increases.

Manufacturers' payrolls in 1955 totaled $713,000,000.00, compared with $609,000,000.00 in 1954. Kentucky is one of nine states which has set a faster pace than the U.S. as a whole in gains in per capita personal income since 1950. Personal income in the state in 1955 averaged $1,238 per person, up 29% over the 1950 figure of $958.

Kentucky has about 50,000 two-car families. Yet there are almost 300,000 more families in the state who need a second car, and many of them can afford it. As family income goes up, as the trend to suburban living grows, as Americans find more leisure, as public transportation facilities dry up, second-car prospects will increase.

The future looks great for the automobile retailer, but it looks encouraging to other retailers too. It looks good for the people who sell homes, appliances and even foreign travel. So the automobile dealer faces extremely tough competition for the consumer dollar. *Let's remember that.*

I have just said that second-car prospects will increase. Universal C.I.T. has for the past two years been keenly alert to the possibilities of this two-car family market. We have made surveys of this sales potential, have urged the adoption of two-car-garage standards and have moved to stimulate dealer and public interest into this relatively unexploited American market.

There are now some 4.5 million two-car families in America, and it is estimated that by 1965 there will be at least 10 million. There are several prime factors involved in this trend to two-car ownership. Family income has steadily increased and prospects for continued increase are good.

THE JOYCE TWO POST
TWIN-MASTER LIFT

Let's take a walk "right-down-the-center" of the new Joyce Twin-Master Lift . . . see the "wide-open-spaces" offering greater under-car accessibility to *all parts* requiring service!

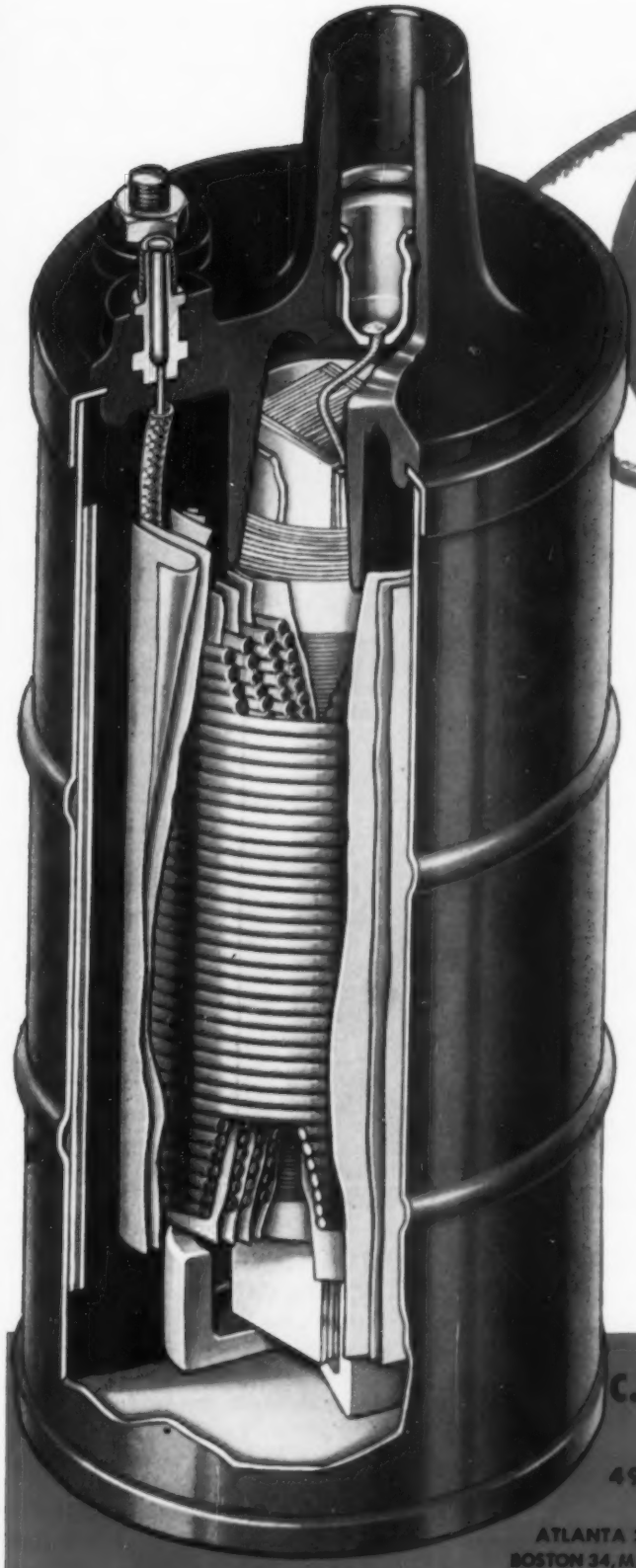
. . . and check these features . . . faster car spotting with one wheel locator . . . car frame contacted directly by lift rails . . . built-in automatic safety latch . . . simple accurate lift control . . . movements of pistons synchronized by foolproof rack and pinion gear . . . a Universal lift that handles pleasure cars, light trucks and sports cars! It's a fact . . . the Joyce Twin-Master Lift with its "right-down-the-center" freedom builds more profits by cutting job time and improving customer relations!

WRITE FOR COMPLETE INFORMATION
OR SEE YOUR JOBBER TODAY!

JOYCE LIFTS

THE JOYCE-CRIDLAND COMPANY
Designers and Builders of Lifting Equipment Since 1873
DAYTON 3, OHIO, U.S.A.

IN CANADA: MIDLAND FOUNDRY & MACHINE CO., LTD., MIDLAND, ONTARIO



Your eye can see NIEHOFF Superiority

ENGINEERED FOR LONG LIFE AND PEAK PERFORMANCE

● Trained eyes can easily see Niehoff's obvious superiority. The plus advantages that make Niehoff Ignition Parts superior to any on the market. You can install Niehoff Ignition Parts with the knowledge that you are building customer satisfaction and your profits.

● Best of all, there is a Niehoff Systematic Service Stock containing all the ignition parts you need to service all makes and models. A Service Stock custom designed for your own business. Ask your jobber to explain Niehoff's merchandising plan—for more sales—for bigger profits, today!

C. E. NIEHOFF & CO.

4925 LAWRENCE AVE., CHICAGO, ILL.

WAREHOUSES

ATLANTA 3, GA., 95 Pine St. N. E. • DALLAS, TEX., 2715 Main St.
BOSTON 34, MASS., 254 Brighton Ave. • NEW YORK 19, N.Y., 250 W. 54th St.
PHILADELPHIA, PA., 1800 Fairmont Ave.
BRANCH: LOS ANGELES 15, CAL., 1330 W. Olympic Blvd.

TIME SAVERS

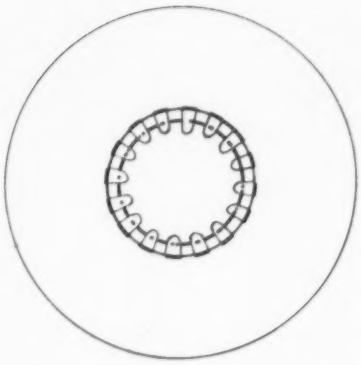
Eliminating the Popping On 1956 Lincolns

When the 1956 Lincolns develop a metallic sound that seems to be in the front system but all efforts to find it there fail, be sure to check the side motor mounts. These may appear to be tight, but often there is a slight looseness where the metal underside of the mount rests on the cross member saddle due to the shoulders' bottoming.

It is the rubbing together of those two metal surfaces that causes the popping sound. There is more than one way of curing the trouble. New mounts will probably stop the metal-to-metal movement, but where new mounts are not desirable, a shim of rubber or other non-metallic material can be placed between the two surfaces before they are tightened together. Even a heavy lubricant at this point will effect a cure for an indefinite time.—*R. D. Hudgens, 2814 Lillian Street, Shreveport, Louisiana.*

Eliminating the Rattle On Lincoln Hub Caps

On both '55 and '56 Lincolns the medallion in the center of the hub cap is held in place by metal tabs bent over on the inside of the cap. Often it is impossible to get enough tension on these tabs to hold the medallion tightly enough to prevent a rattle.



To remedy this, form a circle of wire and bend the tabs over it as shown in the sketch. The tension thus created on the tabs will hold the medallion tight for an indef-

DON'T BE A HEADLINE!

BE SAFE WITH A COLE-HERSEE Master DISCONNECT Switch

TRUCK OVERTURNS AND BURNS

A truck carrying inflammable material crashed and burned on the heavily traveled highway. The truck jackknifed and slid along the highway, and then tipped on its side. A few seconds later it burst into flames. Fire investigators declared that the fire evidently resulted from an electrical spark from the truck's ignition system.

A FLIP OF THE LEVER AND YOU SHUT OFF ALL CURRENT TO PREVENT:

TAMPERING — Disconnects current when parked or garaged. In many cases results in lower insurance premiums.

FIRES — Disconnects battery circuits to prevent fires of any electrical origin.

BATTERY RUN DOWN — No drain if some switches have been unknowingly left "On".

Send For Our Form D-177 For Additional Information.

COLE-HERSEE
Over 40 Years of Consistently Better Products
20 OLD COLONY AVENUE, BOSTON 27, MASS.

GOT A GOOD $7 IDEA?

will be paid for every time - saver or shop short - cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered. Send them to: Southern Automotive Journal, 806 Peachtree St., N. E., Atlanta 8, Ga.

inite time. — *R. D. Hudgens, 2814 Lillian Street, Shreveport, Louisiana.*

Use Nut on Spring Clamp When Installing Hose

A LOT of time and effort can be saved when using spring clamps in installing heater or other hose in hard-to-get-at places by doing this:

Press the ends of clamp together and slip a ¼" or ⅜" nut over them just so they are held closely together. Then put the clamp on the hose and place hose in position. The nut can then be slipped off the ends of the clamp with very little effort and no skinned knuckles. —*C. G. McLeod, 401 Park Avenue, Florence, South Carolina.*

Measuring Wick Gasket For Holley Carburetor

THE Holley carburetors on 1955-56 Mercurys and some Fords use a white cotton wick gasket between the float bowl and air horn.

Since the wick as it comes in the gasket set is always too long, this involves fitting it to the curves of the air horn and then cutting it to the proper length. Where many of these carburetors are handled it saves a lot of time to make a mark on the bench for the correct length of the wick once it is established, after which all wicks used later can be cut to that length.—*Lynn F. Snoddy, 1622 Vivian Street, Shreveport, Louisiana.*

Installing Clutch on Buick Without Removing Springs

WHEN removing a Buick clutch, much time is sometimes lost in removing rear spring bolts and clearing the rear end.

To save time, leave rear coil springs in place. Instead disconnect torque tube as usual and then use a power jack to force the torque tube clear of the transmission. When it is clear, the transmission can be removed easily.

When you reassemble, the rear end is already in line, and most of all you can beat the flat rate with plenty of time left over for some other job.—*Charles D. Trent, Jr., Route 1, Box 98, Elon College, North Carolina.*

Cleaning Dirty Gas Tanks With Vacuum Cleaner

HERE is how we clean dirty gas tanks with a vacuum cleaner:

Insert one end of a small curved radiator hose into a vaccum cleaner hose. Put the other end into the gauge hole of tank. By rocking tank, the dirt comes rolling down to be sucked into vacuum cleaner. —*Owen Monette, Service Manager, Norred Motor Company (Cadillac-Buick), 219 West Broadway, Sweetwater, Texas.*

when you reline with J-M FLEET TESTED brake sets

—they give extra miles of trouble-free service on taxicabs and light trucks

FLEET OWNERS have stated, again and again, on the basis of actual mileage records, that J-M Fleet Tested brake sets are the best linings ever developed for the hard, rugged daily wear and the constant stop-and-go driving required of taxicabs and commercial vehicles.

This special purpose lining has no equal from the standpoint of performance, stopping ability, long life and freedom from scoring tendencies. Designed to withstand abuse, FT sets thrive on severe service.

Put J-M FT sets on your next cab or truck reline job and watch mileage figures jump! Call your J-M Distributor, or write Johns-Manville, Box 14, New York 16, N. Y. In Canada, Port Credit, Ont.

FT Sets for bonding or riveting

Johns-Manville BRAKE LINING

Controlling the Corrosion In Battery Terminals

THIS is our way of controlling battery terminal corrosion:

From an old felt (wool) hat cut a piece about 1¾" square. Then cut a hole in the center of this piece of felt large enough to fit over each battery post. Apply a small amount of wheel bearing grease on both sides of felt washer and place it over the post and apply battery cables.

We have used this many years with good results.—*J. H. Jimmerson, J. H. Jimmerson Pontiac Company, 300 South Main, Newkirk, Oklahoma.*

Eliminating the Noise On Ford Shaft

ON FORDS and Mercurys it is quite common for the drive shaft to give off a "grunting" sound when the car bounces over small bumps in the road.

An easy way to eliminate this trouble is to remove the drive shaft and universal joint assemblies and insert about an inch and a half of ¾" heater hose inside the splines of the front joint. This keeps a slight tension on the splines which will dampen out the noise.—*R. D. Hudgens, 2814 Lillian Street, Shreveport, Louisiana.*

Installing Rocker Arms On the 1955 Fords

WHEN replacing a head gasket or a valve job, it is difficult to install the rocker arms without the valve lifter rods falling into the motor between the head and block assembly.

To correct this, I put a small amount of hand oil or grease on the ends of the valve lifter rods which fit on the camshaft. This helps keep the rods in place until the rocker arms can be installed. — *Gayle Oglesby, 120 Wickliffe Street, Greenville, Kentucky.*

American Motors Ups McGuckin

John H. McGuckin has been promoted to the newly created position of automotive merchandising manager of American Motors Corp., it has been announced by Fred W. Adams, director of automotive advertising and merchandising. McGuckin will supervise all merchandising and sales promotion.

•

The 1957 Dodge trucks are reportedly the only ones which offer push-button driving controls with three-speed automatic transmission. Driving ease is provided by this feature on all low-tonnage and forward-control models. Drivers select a driving range, push a button, accelerate and the truck moves. Stop-and-go driving in city traffic and door-to-door delivery service are easier on drivers and they can do more work with less exertion. This feature is expected to appeal to the many women and girls who drive trucks.

for greater safety

K-D celebrates 40 years of recognized leadership

K-D's growth from an idea in 1916 to a place of leadership in the field of automotive safety proves that *The Complete Line* fills a permanent need. The trade recognizes the advantage of one proved source of Safety Lighting and Accessories. K-D Lamp has earned a reputation for Quality Merchandise . . . progressively engineered for today's need . . . manufactured from the best materials . . . *sold with policies that give a square deal to K-D's* approved automotive jobbers.

lowest last cost

Quality materials . . . know-how engineering . . . skilled workmanship . . . result in higher product costs. But usually installation expense . . . regardless of quality . . . exceeds product cost. K-D's superior quality insures longer life . . . less costly replacements . . . *lowest last cost!*

K-D LAMP COMPANY
1910 ELM STREET • CINCINNATI 10, OHIO
WAREHOUSES: BOSTON - CHICAGO - LOS ANGELES
NEW YORK - PHILADELPHIA - SEATTLE - TORONTO

THE COMPLETE LINE SAFTEE PRODUCTS

Every time you check oil...

ASK TO CHECK THE LEVEL OF FLUID IN BRAKE SYSTEM

WHEN FLUID IS NEEDED—SUPPLY GENUINE

Wagner® Lockheed BRAKE FLUID

Increase your brake fluid sales—and create more customer goodwill—by offering to check the level of brake fluid in master cylinder every time you check the oil. Refill when necessary with S.A.E. approved Wagner Lockheed Brake Fluid. There's none better... none safer. You can depend upon Wagner Quality because Wagner Products are used as original equipment by manufacturers of cars, trucks, buses, and trailers.

Wagner Lockheed Brake Fluid is processed from finest ingredients and chemically balanced to function efficiently in all seasons and under all driving conditions. It mixes with all approved fluids, amply lubricates the system, does not evaporate rapidly. Wagner Lockheed Brake Fluids answer all service needs. 21B is for trucks, buses and cars where heavy duty type fluid is recommended or required by state law.

Available from your nearest Wagner Jobber in 12 oz., quart, gallon, 5-gallon, 30-gallon, and 54-gallon containers. See him today!

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6362 PLYMOUTH AVE., ST. LOUIS 14, MO., U.S.A.
(Branches in principal cities in U.S. and in Canada)

H56-7

LOCKHEED HYDRAULIC BRAKE PARTS and FLUID...CoMaX BRAKE LINING...NoRoL...AIR HORNS
AIR BRAKES...TACHOGRAPHS...ELECTRIC MOTORS...TRANSFORMERS...INDUSTRIAL CRANE BRIDGE BRAKES

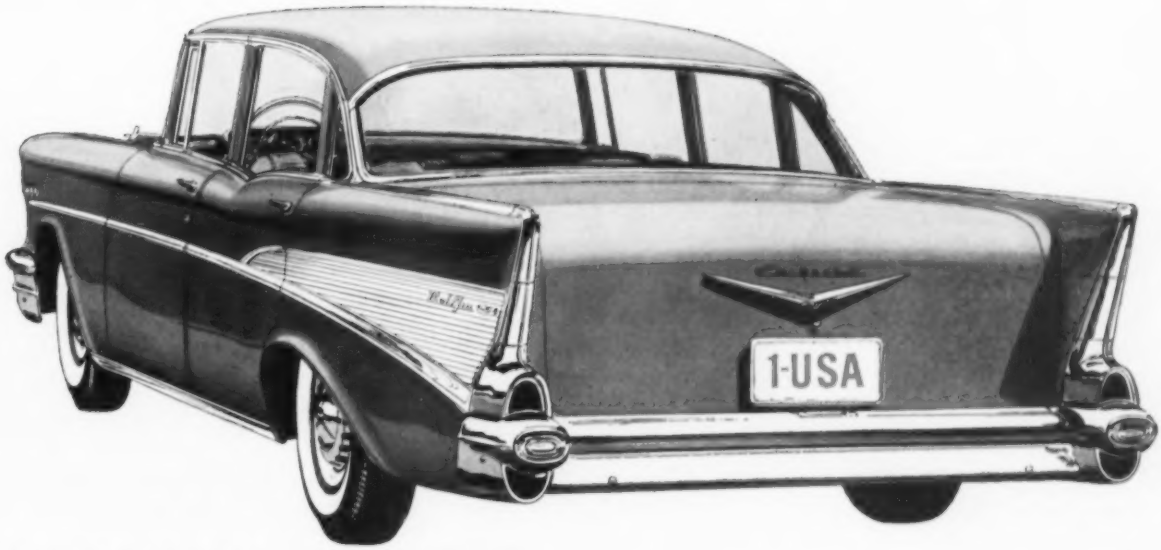
Just out and

The beautifully new Bel Air Sport Coupe with Body by Fisher.

The new Chevrolet it's sweet,

Chevy goes 'em all one better—with a daring new departure in design (looks longer and lower, and it is!), exclusive new Turboglide automatic transmission with triple turbines, a new V8 and a bumper crop of new ideas including fuel injection!

just wonderful!



The new Bel Air 4-Door Sedan—one of 20 striking new Chevies.

for '57... smooth and sassy!

Here's the new car that's winning America's warmest welcome!

Crowds are coming to view it, and staying for a good long look. They like what they see—that stylish new bonnet, that daring new grille, the deeply hooded headlights, the saucy new slant of those High-Fashion rear fenders. Chevy's new and Chevy shows it all over! It's longer and lower for '57.

And Chevrolet's new in lots of ways that don't show. It's new in V8 power options that range up to 245 h.p.* Then, there's a choice of *two* automatic drives as extra-cost options. There's an even finer Powerglide—and new nothing-like-it Turboglide that offers triple-turbine take-off.

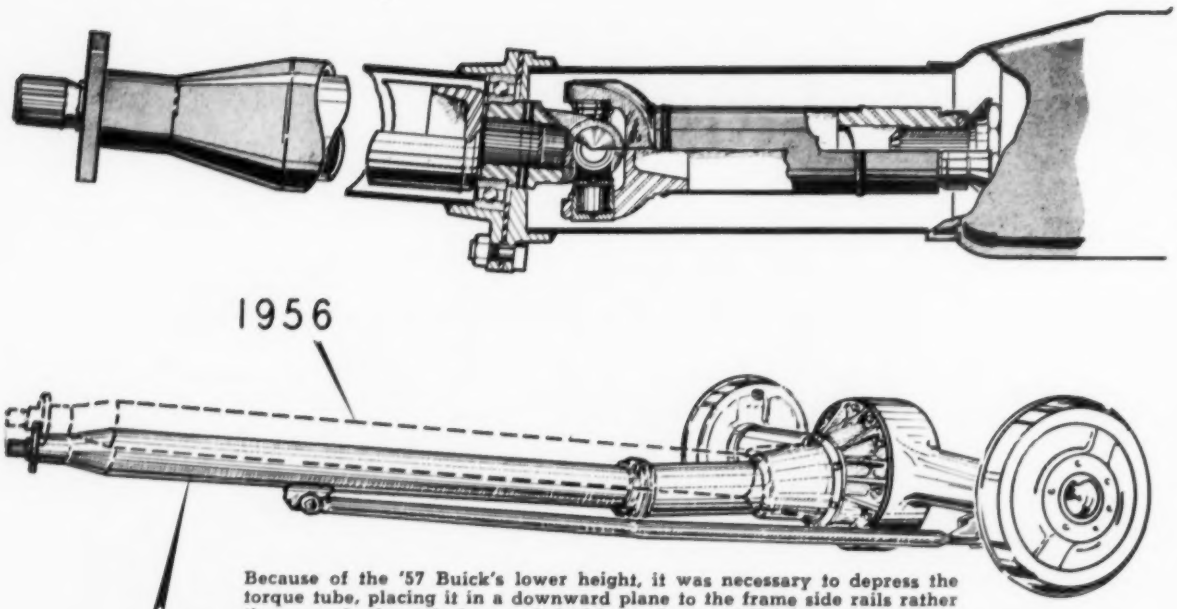
Now—fuel injection offered for the first time! Greatest engine advance since overhead valves! Chevrolet engines with Ramjet fuel injection, available at extra cost in the Corvette and passenger car models, deliver up to 283 h.p.

All in all, 1957 promises to be another great year for Chevrolet and Chevrolet dealers....Chevrolet Division of General Motors, Detroit 2, Michigan.

CHEVROLET

1 USA
'57 CHEVROLET

**Special high-performance 270-h.p. engine also available at extra cost.*



Because of the '57 Buick's lower height, it was necessary to depress the torque tube, placing it in a downward plane to the frame side rails rather than on a horizontal plane as it had been. A second U-joint was necessary and was placed at the rear end of the propeller shaft. The U-joint assembly includes a yoke connecting the joint to differential. Cutaway of the '57 drive line is reproduced here.

1957 Buicks Employ New Engine Mounts

NEWLY-DESIGNED nodal point engine and transmission mounting systems will be used on all Buick series for 1957.

These systems, which have been increased in area to accommodate the greater torque, will use mounts at four points in the 60-50-70 Series, but due to the transmission design, the Series 40 will use mounts at three points only.

Any vibrating body has points at which there is very little vibration, called nodal points. Therefore, mounting the engine and transmission at these points allows very little vibration to be transmitted to the frame, which is the mounting structure.

Engine and transmission mounts for 1957 have been placed at an angle to the center of the crankshaft. This angle was so chosen to insure that a line drawn perpendicular to the surface of the mounts will pass through the principal axis, this being one about which a body rotates due to the distribution of its mass or weight.

Torque reaction and firing impulses will cause the engine to rotate about this axis. The engine and transmission mounts exert the only restraining force to this rotation, and this force can only be applied by the strength of the mounts in shear. The basic reason for adoption of this angle system is to utilize the low shear rate of the mounts.

In most material, the shear rate is much lower than that of compression. In the synthetic rubber compound used by Buick, the shear rate is 1/9th that of compression. This low shear rate results in a correspondingly low torsional rate of the engine and transmission. This low torsional rate is one of the requirements of a soft engine "feel."

Placing the front mounts at an angle also increases the lateral stability of the engine because the mounts are in partial compression. This increased lateral stability gives greater control when hard stops are made on "washboard" roads.

The transmission mounting system, with this additional lateral stability, increases lateral control of the torque ball, which in turn minimizes rear wheel kick.

One other important characteristic of the synthetic rubber compound used in the 1957 mounts is its high dampening coefficient. As a result, engine vibration, if excited by a sudden road shock, will be dampened out and will not continue as does the vibration of a bell after the bell has been struck.

This year, as in previous years, the mounting system is tuned to frequencies which are removed from those of ride and shake.

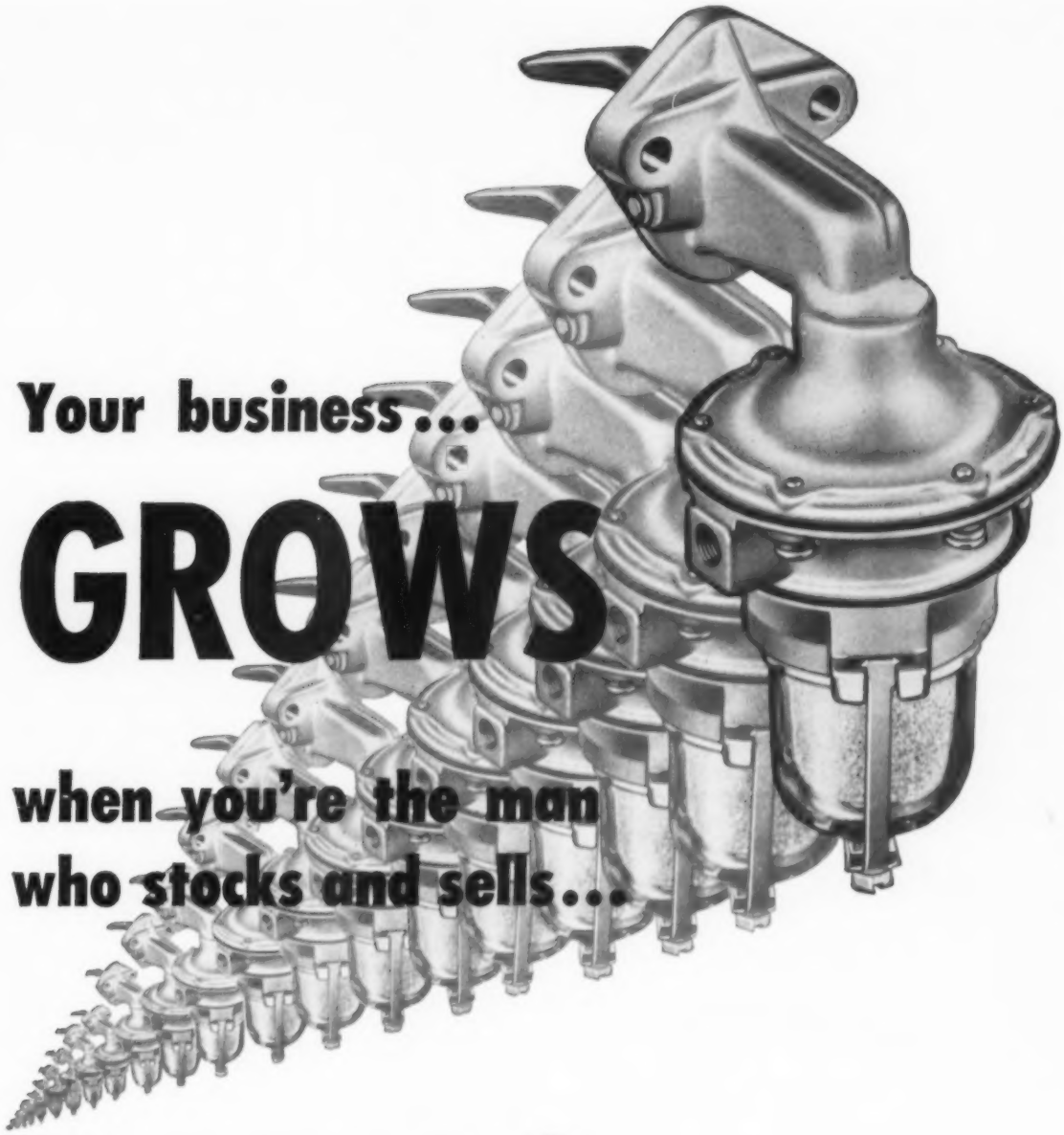
Trucking Industry's Role Cited by Tire Chief

VIRTUALLY every industry and retail establishment would come to a standstill if the nation's trucks were idled for only 96 hours, the president of the B. F. Goodrich Tire Co. asserted last month.

E. F. Tomlinson, in a statement released on the eve of the opening of the American Trucking Association's annual convention in New York, called motor transportation "a self-generating industry of vital importance to American businessmen and consumers—one of the pioneering forces that has helped to make America great."

The trucking industry, he said, is heading into a period of continuing growth. The flexibility of truck transportation, he added, is needed to allow for the natural growth and development of the nation's economy.

"The motor truck," Tomlinson continued, "has made it possible to streamline distribution methods and to give speedier, more economical service to customers all over the nation. The trucking industry has allowed us to establish branch plants and distribution centers that have brought employment and prosperity to smaller communities while still permitting the economies of centralized production."



Your business...

GROWS

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CARTER POWER CENTER® FUEL PUMPS

Drivers with fuel pump trouble welcome this rugged, road-tested Carter. During just a few short years Carter Fuel Pumps have become one of the most popular pumps among leading manufacturers of cars and trucks.

Sell the *Power Center* Fuel Pump that has been tested on grueling cross-country truck runs and come through with flying colors.

CARTER CARBURETOR
DIVISION OF ACF INDUSTRIES
INCORPORATED
ST. LOUIS 7, MISSOURI

Cold Weather Doctoring

(Continued from page 66)

ural sponge. Use a light, circular motion until the foam disappears. Clean one panel at a time and overlap on the next panel. Squeeze the solution from the sponge before cleaning the next panel. Lay the nap down and allow it to dry. When completely dry, brush the material with a dry, soft brush. Brush from right to left with light strokes.

Mixture No. 2 can also be used to remove bugs and bug "juice" from the exterior car finish and to clean black or white sidewall tires.

Body undercoating:

Undercoating is highly resistant to abrasion and corrosion and is designed to give maximum sound deadening. When properly applied, it is an excellent sealer for dust and water leaks and, in many cases, it can be used effectively to treat pinpoint holes and body welds.

Two types of undercoating are recommended: the regular solvent type and the water emulsion type. The latter is used in areas where local and state regulations restrict the use of the solvent-type undercoating.

Preparation of the vehicle:

Undercoating must be applied to clean, dry surface. If the car is new, simply wipe the surface to be undercoated with a dry rag. If it is old, remove mud and grease with a wire brush, or steam-clean the vehicle. Undercoating will adhere to either bare metal or painted surfaces, even if slightly dusty or oily, but will not adhere to a wet surface.

After a vehicle is washed or steam-cleaned, make sure all surfaces are thoroughly dry. Use an air hose to save time and improve the quality of the job.

Place the vehicle on a free-wheel hoist and remove all four wheels. Provide plenty of light.

Examine the body bolts and make sure they are tight on both new and old cars. Mask off any parts of the car that are likely to be exposed to overspray.

Caution: Be sure to mask the drain holes in the quarter panels.

Spraying:

Caution: When spraying with the solvent-type material, observe the same precautions as when spraying with paint. Do not permit welding operations or smoking in the spray areas of your place.

Spray undercoating on all underbody sheet metal surfaces, frames, braces, gas tank and under the fenders.

Spray the center underside of the fenders a little heavier to provide additional protection from objects thrown up by the tires.

Spray the hard-to-reach parts first, with normal pressure on the material but low atomizing pressure; then increase the atomizing pressure and spray the balance of the car.

Caution: Do not spray the brake mechanism, oil pan, differential, transmission, lubrication points, driveshaft, exhaust pipe and muffler, hood, or any working parts.

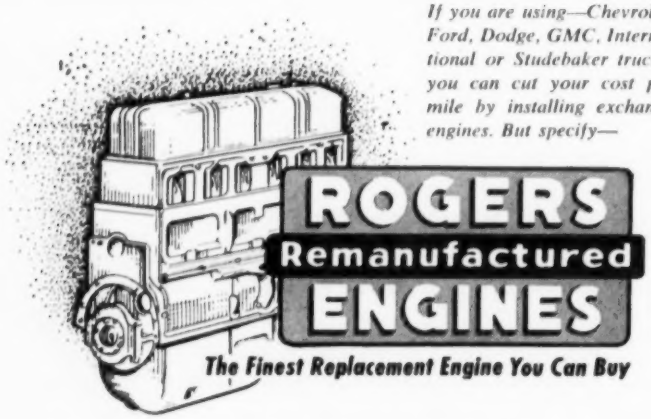
Adjust and operate the spraying equipment according to the manufacturer's directions.

After spraying, be sure to clean accidentally applied undercoating from all working parts. If the solvent-type material is used, dip a cloth in kerosene or solvent and wipe off the unwanted material. Water emulsion-type undercoating can easily be cleaned from surfaces before the material dries by washing with water and then wiping with naphtha.

Caution: As a final step, remove the masking tape and be sure that all drain holes are free of obstructions.

Fleet Operators—

If you are using—Chevrolet, Ford, Dodge, GMC, International or Studebaker trucks, you can cut your cost per mile by installing exchange engines. But specify—



It's being proved every day. Use your skilled mechanics on the heavy-duty big jobs—put the already assembled, run-in and Dynamometer tested Rogers exchange engines in the lighter units. Save time *and* money.

JOHN ROGERS CO. | *300 Hunnicutt Street, N. W. Atlanta, Georgia*

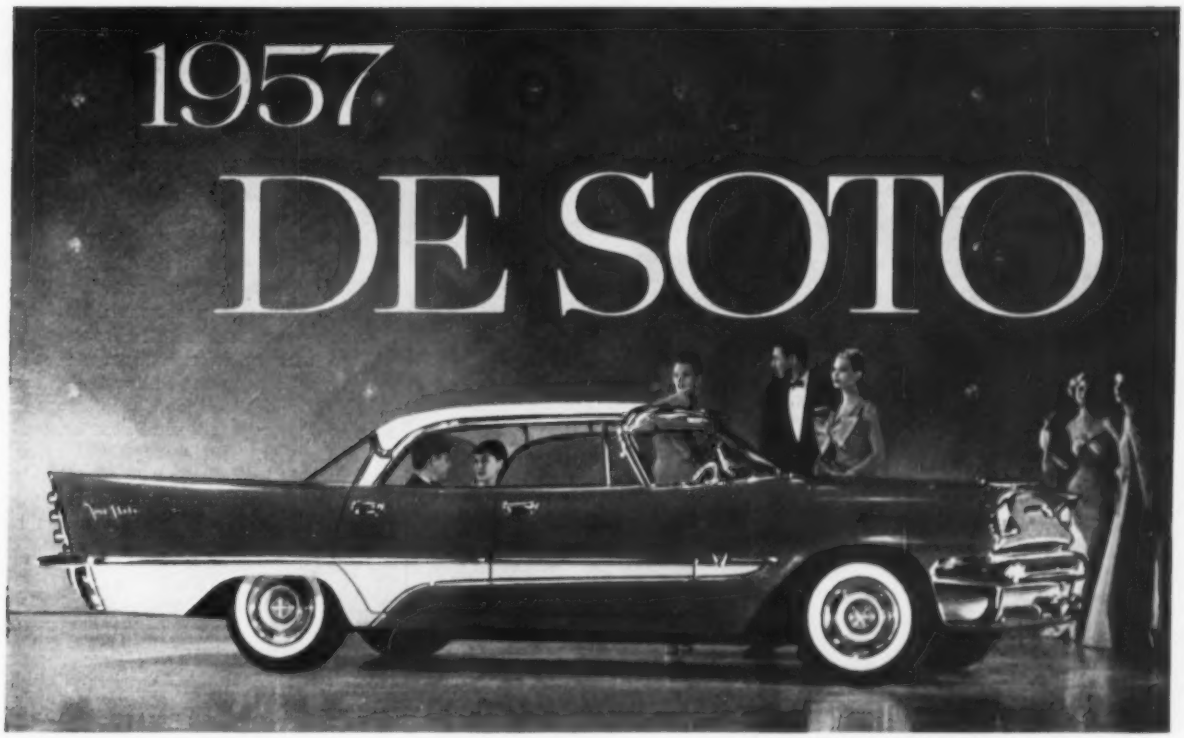
Shaping the Outgo

(Continued from page 34)

outstanding example of hard work and quality performance, he has pulled up the whole caliber of the shop. Here, too, customer comebacks are reduced to a minimum because each customer's car is treated as if it were a new car. Customer rates were increased with the superior quality we were now giving.

It is admittedly a difficult job to keep obsolescence out of the parts department. Every dealer knows that where obsolescence is not carefully watched, a department can run into a loss of thousands of dollars annually. We are striving to decrease our parts inventory by 50%, cutting back mainly in slow-moving items, filling in with fast-moving ones. A partial perpetual inventory record compiled from the parts order blank is watched closely now to hold down obsolescence. We find we need fewer motor parts and rear-end parts because cars are built better today and need fewer functional parts.

The dealer who can keep his



FIREFLITE SPORTSMAN BY DE SOTO, GOWNS BY I. MAGNIN

These great advances make the '57 DE SOTO the most exciting car in the world today!

New *Flight Sweep* styling. For 1957 De Soto presents the new shape of motion! Long, upswept tail fins; sleek, lower-than-ever lines; 40% more glass area.

New *Torque-Flite* transmission. Most advanced transmission ever built! Tremendous getaway and passing power . . . velvet-smooth acceleration.

New *Torsion-Aire* ride. Here is the smoothest ride you've ever had in an automobile. You take corners without lean or sway. Braking is level as a table top.

New super-powered V-8 engines. There are three powerful new De Soto V-8's to choose from . . . with higher-than-ever horsepower for safer passing.

New *Push-Button* control. Simply touch a button of De Soto's new Triple-Range push-button control—and you're on your way!

De Soto dealers present

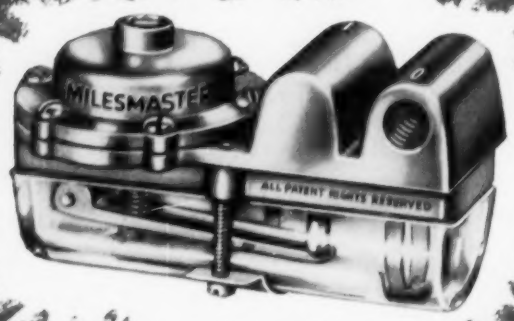
Groucho Marx in "You Bet Your Life" on NBC radio and TV

New *4-Season* air conditioner. Mounted out of the way under the dash—it *cools* in summer, *heats* in winter . . . one simple set of controls.

New interior features. Exciting new fabrics, smart accenting trim, new flight-styled instrument panel.

Your choice of every advanced power feature. See the most exciting car in the world today at your neighborhood De Soto-Plymouth dealer's.

Increase Gas Mileage Stop Vapor Lock . . . with



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$6.95 plus installation

...the Fuel Pressure Regulator that convinced the experts Corrects Common Car Complaints!

Stop fiddling around. Save yourself trouble. Make a profit on ALL your service time. Install a Milesmaster on every engine that comes into your shop.

You'll have a lot of happy customers because Milesmaster cuts down harmful, high fuel pump pressures and puts fun back in driving.

Milesmaster is the most popular engine accessory on the market today. Your customers have seen it advertised in national consumer automobile and mechanical magazines. They know about it and will buy it on your recommendation.

See your jobber or write for literature and prices today.

What MILESMASTER does for any car

- Saves up to 20% on fuel costs
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- Makes engine start quicker
- Provides smooth idle
- Eliminates "jerking" at all speeds
- Eliminates stalls from Flooding Percolation Vapor Lock
- Filters the fuel
- Magnetically traps steel and rust particles
- Reduces carburetor wear
- Pays for itself quickly

MONEY-BACK GUARANTEE
Have your dealer install MILESMASTER on your car. Drive it for two weeks. If not completely satisfied, your money will be refunded in full.
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Factory and Sales:
Box 25, Exeland, Wis., U. S. A.
Executive Office: Suite 703
6 N. Michigan Ave., Chicago 2, Ill.

used-car inventory to a 15-day turnover unitwise and dollarwise, and his new-car inventory to a 30-day supply, can consider his operation, in our opinion, a healthy one. We figure that it costs us $4 a day for each used car standing on the lot. Moreover, we feel we can do a better used-car selling job if selection is good and our inventory not too large.

The key to a hard-hitting sales department, we are convinced, is highly trained personnel. Not the clock watcher, not the man content merely to exist, yet not the man who puts the dollar first, and not the fault-finder, but a man sincerely and genuinely interested in developing himself, advancing himself by a slow and steady growth, who understands intuitively that as long as the business is open he will have a job here.

Watch Pocketbook Watcher

But if he puts big and fast earnings as his immediate objective, without the attention and quality of service a customer is entitled to, then he ought to realize business cannot survive, nor will he be able to hold onto his job. He becomes a floater and after he makes the rounds of several dealerships, what next? Nobody wants a floater.

In this department, as in others, we are taking an approach of quality. Price is not the first thing to discuss with a new-car prospect. We stress getting the prospect interested in the car itself, and in the company with whom he intends to do business.

A new car is costly. A customer should drive it first and see whether he likes it. If he doesn't like it, he'll be a dissatisfied owner.

We want our prospect to know that he is dealing with a dependable and informed salesman of integrity who will carry through to the ultimate satisfaction of the customer. Also, our dealership is one of established reputation standing firmly behind its product and behind each deal.

We are absolutely convinced that customers can be won and held only through dignified and sound practices. A volume business built on price alone cannot survive. Most customers like to get a good deal, but not so good they are made to feel the dealer cannot afford good service. And most, I believe, want the dealer to make his fair return on a deal.

Repeat business, the touchstone of growth, can be built only with satisfied customers.

MONEY!
MONEY!
MONEY!

Now!

The ONLY OFFER OF ITS KIND in the INDUSTRY!

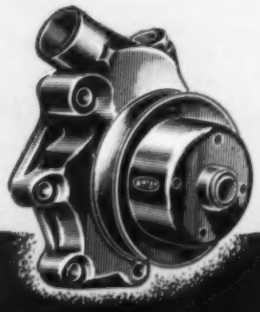
JUNK FUEL PUMP CORES are LIKE CASH on the purchase of NEW AIRTEX WATER PUMPS as well as FUEL PUMPS

NOTE:
Only FUEL PUMP CORES can be traded in on NEW WATER PUMPS
(no water pump cores accepted)

SINGLE TYPE FUEL PUMP CORES worth 25c

DUAL TYPE FUEL PUMP CORES worth 50c

Under our new plan, any worn out fuel pump, regardless of make or condition will be accepted for credit. Therefore 2 single-type junk fuel pumps or 1 dual-type junk fuel pump can be applied to the purchase of a new water pump. All new Airtex Water Pumps are fully guaranteed!



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SEE YOUR JOBBER on the complete line of *Job-Designed* Ken-Tools. Forged by the largest exclusive manufacturer of top-quality Tire-changing Tools and Equipment. THE KEN-TOOL MFG. CO., AKRON 5, OHIO.

JOB-DESIGNED
KEN-TOOLS
TIRE-CHANGING TOOLS KNOWN, USED AROUND THE WORLD

Mercury Sports B Shell

(Continued from page 44)

retor with dual float chambers for more even distribution of fuel. A thermostatically controlled dual air intake regulates carburetor air temperature summer or winter.

Maximum engine power with the best possible fuel economy is provided by this carburetor which operates on the two primary barrels at normal speed and on four barrels at high speeds or for extra acceleration for passing.

Mercury's new Thermo-matic carburetor air intake system assures a fast engine warm-up, and helps prevent carburetor icing and hot-weather sluggishness. These new dual hot or cold air intakes adjust the air temperature which the engine breathes to the engine's own requirements, thus practically eliminating variance in performance and economy due to temperature and weather changes. Air for the carburetor is taken in from the outside or from inside the engine compartment, depending on the engine's requirements. Generally in warm weather cool air is drawn from outside, increasing fuel economy and helping prevent vapor lock.

In cold weather warm air from under the hood is used, giving faster warm-up and helping eliminate carburetor icing. The thermostatic control adjusts the air intake to provide the desired air temperature for most efficient engine operation.

A new type of air cleaner passes the air through a large surfaced micronite filter which gives maximum protection with minimum maintenance. The filter is cleaned periodically by merely tapping the dust and dirt from it.

A unique power booster fan that saves up to 17hp is a standard feature on all Montclairs and Colony Park and Voyager station wagons with the Safety-Surge V-8 engine. The power booster reduces engine fan speed to idle when it is not needed for engine cooling, thus improving performance, saving fuel and reducing engine noise.

Air cushion rear suspension—first in the industry for passenger cars—is featured in many models as part of Mercury's all-new "floating ride," designed to smother bumps, vibrations and road noises and provide smooth, effortless driving. An air cushion (at atmospheric pressure) the size and shape of a 6"-by-1½" tire is inserted between the frame and the rear spring front eye and absorbs both driving and braking forces together with bumps and jounces encountered in any type of road.

The Mercury specifications:

255hp engine		290hp engine
9.75 to 1	Compression ratio	9.75 to 1
3.80	Bore	4.00
3.44	Stroke	3.60
340 at 2,600 rpm	Torque	405 at 2,800 rpm
255 at 4,600 rpm	Horsepower	290 at 4,600 rpm
312 cubic inches	Displacement	368 cubic inches

Dodge Drops 5"

(Continued from page 49)

aid cleaner and four-barrel intake manifold. A special D-500 engine, featuring a redesigned intake manifold and a four-barrel carburetor also are available. Compression ratio of the Getaway 6 is 8.0 to 1 and the displacement is 230 cubic inches.

The Red Ram V-8 has a bore of 3.69 and stroke of 3.80. The six has 3.25 and 4.63. Regular fuel is recommended for both. Valve arrangement is overhead-lateral on the Red Ram and in-line on the six.

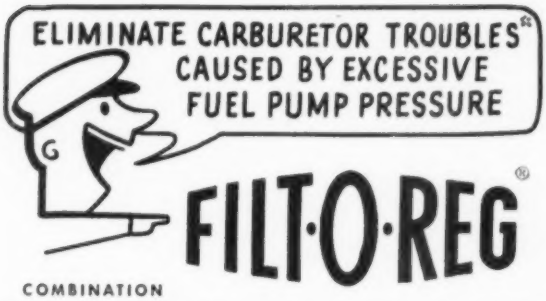
The Red Ram V-8 develops 245-hp at 4,400 rpm. The Super Red Ram V-8 develops 260hp at 4,400 rpm. The D-500 develops 310hp at 4,800 rpm. The Getaway six hits 138hp at 4,000 rpm.

Wheelbase of the new models is 122", with over-all length of 212.2".

Paper-element air cleaners and silencers are featured on all engines. The new cleaners are small and compact and fit against the side of the engine instead of bulking on top of the engine as in the past. This innovation has contributed substantially to the lowered silhouette of the line.

One feature of the 1957 Dodge that was also found on the previous year's model is the LifeGuard safety door latch, but this year they've coupled the time-tested latch with new and safer handles.

The handles are recessed horizontal bars that pull out.



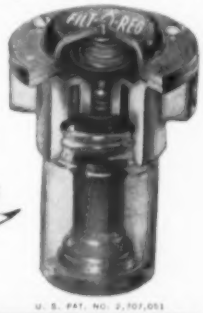
FILT-O-REG®

COMBINATION

FUEL PRESSURE REGULATOR-FILTER

*STOPS FLOODING, STALLING, ROUGH IDLING. CUTS FUEL WASTE

FILT-O-REG feeds the full and correct amount of filtered fuel to the carburetor at minimum pressure under any load, at all speeds and extreme weather temperatures. Exerts a maximum 2 lbs. p.s.i., constant fuel pressure on the carburetor float valve and seat. This provides the proper float level under all driving conditions. FILT-O-REG fits in the fuel line of any make or model car, truck, tractor or stationary gasoline engine. Factory set. No adjustment necessary. INSTALL FILT-O-REG ON YOUR NEXT TROUBLE ENGINE! *Complete Satisfaction Guaranteed.*



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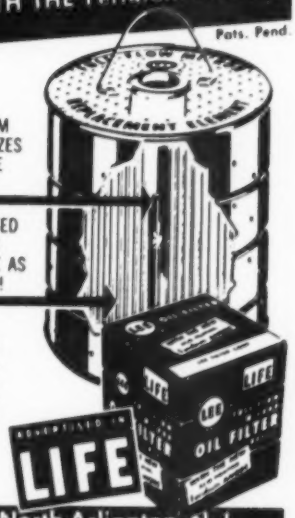
LEE OIL FILTER

WITH THE Feridium® ANODE

Pats. Pend.



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16 FEET OF ACCORDION-PLEATED FILTERING ELEMENT TRAPS ASPHALT AND CARBON AS FINE AS 5 MILLIONTHS OF AN INCH!

Feridium is an exclusive LEE development. Independent laboratory and road tests prove conclusively that LEE FILTERS with the Feridium Anode will out-filter any popular filter. Most important, they cost no more!

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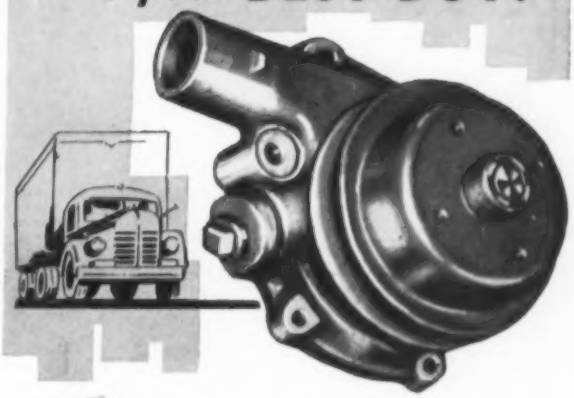
LEE FILTER CORP., North Arlington, N.J.

MASTER M WATER PUMPS

WATER PUMPS are your BEST BUY!



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8. PRICED FOR LIBERAL PROFIT
9. OUTSTANDING POINT-OF-SALE HELPS—INCLUDING METAL DISPLAY STAND
10. UNCONDITIONALLY GUARANTEED

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IGNITION SERVICE & SUPPLY
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WRIGHT SUPPLY CO.
Owensboro, Kentucky

CRAFT HI-WAY AUTO PARTS
Prichard, Alabama

Officers of the Automotive Booster Club of South Texas, No. 30, Houston, named in annual election last month, are (l. to r.): Carl Rebsch, treasurer; James E. Seifert, secretary; Jack Heck, second vice-president; Bryant T. "Tim" Scofield, president, and C. F. Mackey, retiring president. Andy Young, first vice-president, is not shown.

Jobber News

(Continued from page 57)

"Better Shops" Is Theme of AERA

"BETTER Shops Ease the Profits Squeeze" is the theme adopted by Automotive Engine Rebuilders Association at Chicago last month for its 36th annual convention to be held in Detroit May 12-15.

It was reported that approximately three-fourths of the conference booths had already been reserved and membership is at an all-time high.

A revised set of bylaws providing for further development of association benefits was approved by the board and is soon to be printed and submitted to the membership for a vote.

Raskin Joins Frank Russell

Dave Raskin, formerly with Powell Muffler Co., Inc., has joined the W. Frank Russell Co., Dallas, Texas, and will cover territory formerly covered by Harry Saltzman, who has left the company to enter the wholesale automotive supply business in San Antonio.

Trapp Returns to Whelan

Duncan Trapp has returned to the sales staff of the H. H. Whelan Co., Dallas, Texas, after an absence of several years, according to Mrs. H. H. Whelan, owner and manager.

"**Lewis Watson,** formerly with a wholesaler in Lampasas, Texas, started August 15 working our Hidalgo County territory, which includes Mission, McAllen, Edinburg, and Weslaco," announced **Jerry Muggli,** manager of **Grindle Sales Co.,** Harlingen, Texas.

NEW

First really new finish in 25 years

Dries in 30 Minutes to High Lustre—No Rubbing

Demonstration proves new Acme Super Fleet-X dries faster than any previous enamel! Now you can put a car outside after a 30-minute drying time—you do more cars in a much smaller space! Even on the hottest day, Super Fleet-X remains wrinkle-free.

It is almost odorless with little overspray—and the spray dust is not sticky. You cut shop time yet this miracle paint has greater durability and retains lustre longer. You'll also like the fact that it will not "skin over" in the package after partial usage.

Nice, too, are the smiles you get from customers after using Super Fleet-X. They appreciate the durable "wet-look" lustre that actually increases with time. They'll like your extra quick service, too. Why not call your Acme jobber today?

TESTED AND PROVEN—In tests and demonstrations across the country—under all types of shop conditions—new Acme Super Fleet-X amazes all who see it.

ACME

ACME WAY Makes PAINTING PAY

AUTOMOTIVE FINISHES

ACME QUALITY PAINTS, INC.
8250 ST. AUBIN, DETROIT 11, MICHIGAN

Garagemen of Ohio, evidencing a growing trend over the United States, gathered organizational strength last month at their first annual convention, held at Cleveland. Shown here are (l. to r.): Front row, Sam Martin, secretary-treasurer of the Warren unit; George Milliken, second vice-president; Ben Dieterich of Cleveland, third vice-president; Frank Hornyak of Struthers, president; William Good of Canton, first vice-president, and Harold Gringle of Toledo, secretary-treasurer and a garageman for ten years who was employed as executive director. Delegates from various local units appear in background. The program for the coming year includes promotion of a compulsory motor vehicle inspection law, licensing of mechanics and garages, a lien law and customer estimate deposits on body work. Ira Saks, Cleveland manufacturer, and Ralph H. James of Tulsa, executive director of Independent Garage Owners of America, were among the convention speakers. The second annual convention of the Independent Garage Owners of America will be held at Toledo June 20-23, it has been announced.

Atlas Weight Appoints Men for the South

SOUTHERN representatives have been named by Atlas Weight Co., Atlanta, Ga., which was recently purchased by Whitehead Die Casting Co., Ltd. They are:

Carl Clifton in Georgia, Florida and Alabama; Walter Pope in North Carolina, South Carolina and Virginia; L. M. Cressy, Jr., in Louisiana; Nelson Huff in Arkansas, Oklahoma and northern Texas; Bill Kail in southern Texas; Jim Rule in Kentucky and Tennessee; Carl Smith in Delaware, Maryland and the District of Columbia.

•

Manager Robert Hill says this listing of telephone numbers for all sources of parts and equipment at Charlotte, N. C., has been a popular promotion for Motor Parts and Gear Co. Note space left open down in alphabetical listing where the Motor Parts and Gear salesman can rubber-stamp his name.

ACE PRESTO PATCHES
VULCANIZE WITHOUT HEAT

WINNING DEAL IN TUBELESS TIRE AND TUBE REPAIR

No. 505 — Tubeless Tire Patches for repairing bruises and breaks without HEAT.

No. 501, 502 and 503
Revolutionary new tubeless tire and tube patches which vulcanize without HEAT. Press it on — PRESTO, it's fixed.

No. A-11 Buffer-Stitcher

FOR COMPLETE INFORMATION — WRITE
ACE RUBBER COMPANY
BOX 6147 DALLAS, TEXAS

"Host" member and two officers of the VCAWA took time out for the photographer last month (l. to r.): R. G. Devlin of Winston-Salem, J. A. "Skeeter" Richardson of Richmond, Va., secretary-treasurer, and Frank G. McKenzie of Bluefield, W. Va., president. R. E. Kirkland, Jr., of Wilson, N. C., was elected vice-president to succeed Guy M. Tarrant of Columbia, S. C., who resigned the post because of his illness.

New Dealer Law Should Also Cover Service Stations, VCAWA Is Told

THE "Good Faith" law enacted through the efforts of the National Automobile Dealers Association this year should be amended to give some similar "freedom" to service station operators, the fall convention of the Virginias-Carolinas Automotive Wholesalers Association was told at Winston-Salem, N. C., last month.

James W. Cassedy of Washington, D. C., general counsel for Motor and Equipment Wholesalers Association, pointed out that franchised dealers were now able to buy certain parts and supplies from other than their own factory source and that the new congress should extend this so any service station operator could buy from independent wholesalers.

Forty-nine representatives of 34 of the 56 member firms were present for the convention, which heard Jesse F. Jones, Jr., executive secretary of the North Carolina Automotive Wholesalers Association, say that the members of the VCAWA were the logical ones to spearhead any movement for state groups in the Virginias and South Carolina, since the North Carolina VCAWA members had been so prominent in NCAWA.

Robert W. Nix of Albany, Ga., field secretary of National Standard Parts Association, asserted:

"Since the majority of automotive wholesalers' distribution is channeled through independent garagemen and service station operators, coordinated efforts to provide these retail outlets with every possible aid must be continued and expanded.

"We must do everything possible to build public confidence in these outlets through upgrading automotive repair shops and garages so they will have the needed equipment, products and personnel to perform quality work that creates good-will."

William C. "Bill" Herbert, editor of SOUTHERN AUTOMOTIVE JOURNAL, discussed the outlook for new-car sales in the new model year.

Walter F. Green of Green Auto Parts, Harrisonburg, Va., was elected a member.

Topics co-chairmen were Ned Holland of Greenville, S. C., and L. T. White, Jr., of Raleigh. Chairmen for the various topics included Oscar Newberry of Spartanburg, S. C., J. Allen Lewis of Wilmington, N. C., Phil Bergheimer of Richmond, Va., H. Lester Flowers of Hickory, N. C., Edward MacClements of Charlotte, N. C., Ran Myers of Lynchburg, Va., Mrs. Alex B. Kohn of Charlotte, N. C., and Emory R. Young of Charleston, W. Va.

The dinner speaker was Dr. Victor S. Armbrister, dean of Emory and Henry College.

Sparton Names Atlanta Firm

Ray M. Smith & Associates, 298 Howard St., S. E., Atlanta, Ga., has been named southern distributor for Sparton Automotive Division of The Sparks-Withington Co., Sales Manager J. J. Bigelow announced. Smith will cover Tennessee, Alabama, Mississippi, Florida and Georgia.

Cross-Allen Moves

Cross-Allen Co. has moved to its new location, 4th and Trinity Streets, in Austin, Texas, where it has twice the floor space it did have, according to Owner G. C. Cross.

Richman Names Atlanta Firm

Aaron and Bell Co., Atlanta, Ga., has been appointed to represent Richman Chemical Products Co., Inc., Chicago, in the southeastern states.

"We have added the **Thompson** line of hard parts, **Perfection** gears, clutches, etc., and **Neapco** U-joints," reported **Al Jones, Sr.**, senior partner of **Al Jones & Co.**, Tampa, Fla.

Industry Show to Be Revived

THE FOLLOWING joint press release was issued Oct. 24. by Motor and Equipment Manufacturers Association and Motor and Equipment Wholesalers Association:

"Recognizing the need of the automotive aftermarket for an industrywide show and meeting of manufacturers and wholesalers at a central location where adequate exhibit space and hotel facilities are available, the Motor and Equipment Manufacturers Association proposed to the Motor and Equipment Wholesalers Association that the Automotive Service Industries Show be reactivated. The board of directors of MEWA unanimously accepted the proposal. These two associations have therefore agreed to reactivate the ASI Show. Details as to time and place will be announced at a later date.

"The National Standard Parts Association has been informed regarding this agreement for such action as it may wish to take with respect to participation in the next ASI Show. It appears that the reactivated ASI Show will be held in 1958 at a time and place not in conflict with presently scheduled regional shows."

Georgia Association Adds Three New Members

THREE new members have been added to the roster of the Georgia Automotive Wholesalers Association, Jack Fraser of Genuine Parts Co., Atlanta, chairman of the membership committee, announced this month.

They are Manchester Auto Parts, Manchester; Cottle's Auto Supply, West Point, and Cottle's Auto Supply, Newnan. They were obtained through the efforts of Ray Birdsall of Piston Ring & Parts Co., LaGrange.

Ernest G. Spuhler of John A. Harris & Son, Atlanta, association president, announced that pending the selection of an executive secretary to replace J. H. Crutchfield, who resigned to accept another position, an executive committee would operate the affairs of the group. It is composed of Spuhler, Jack Fraser, W. E. Taylor of Augusta, Ga., Luther Drennon and L. C. Matthews, the latter two from Atlanta.

At a recent meeting the directors authorized active participation in the Anti-Monopoly Committee of the Automotive Service Industry.

24 Southerners Admitted To MEWA Membership

TWENTY-FOUR Southerners were among new members added recently by Motor and Equipment Wholesalers Association.

New southern members are Arnau Tire & Accessory Co., Dublin, Ga.; Auto Parts & Bearing Co., Hot Springs, Ark.; Auto Parts Co., Inc., Morgantown, W. Va.; Auto Parts Service Co. of Tifton, Inc., Tifton, Ga.; Broyles Rubber Oil Co., Greeneville, Tenn.; Cain's Parts & Service, Lake Wales, Fla.

T. C. Drake Auto Parts Co., Maryville, Tenn.; Dunbar Motor Parts Co., Dunbar, W. Va.; The Fergerson Co., Paducah, Ky.; Gardner - Voiers Auto Supply, Maysville, Ky.; Gordon Auto Parts, Moundsville, W. Va.; The Griffin Co., Florence, Ala.; Harbison and Gathright, Inc., Louisville, Ky.; Holland Auto Supply, Inc., Greenville, S. C.

Madison Auto Supply, Madison, Ga.; Motor Service, Inc., Parkersburg, W. Va.; New Dixie Auto Parts, Vine Grove, Ky.; Oxford Auto Parts, Oxford, Miss.; Penton-Shepard Tire Co., Miami, Fla.; Piston Ring & Supply Co., LaGrange, Ga.; Price Auto Supply Co., Columbus, Miss.; Shawnee Motor Supply Co., Shawnee, Okla.; Smith Automotive Co., Inc., South Boston, Va., and Tri-State Motor Supply Co., Inc., Middlesboro, Ky.

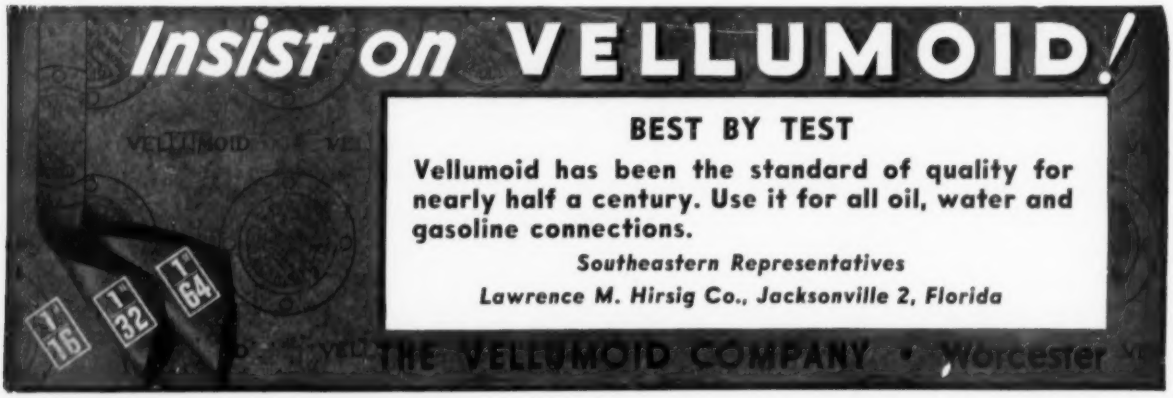
McQuay-Norris Hires Five As Sales Specialists

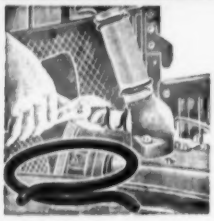
MCQUAY-NORRIS Mfg. Co., St. Louis, Mo., has appointed five new members to its specialized corps of piston ring sales engineers, according to Carl R. Wippern, executive vice-president.

Ray Dutton and Orville Terzenbach will cover New Mexico, Arizona and southern California; Ted Adams and Tom North will work in the central and northern plains states, and Art Cox has been assigned to the southeastern states.

K-D Lamp Grows in Dallas

K-D Lamp Co. of Cincinnati, O., has announced the opening of a new warehouse at 2914 Canton St., Dallas 1, Texas, to serve customers throughout the Southwest. The company is represented in that territory by Troy Rose, whose headquarters is in Dallas.





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Champ-Items No. 656 Self-Tightening Hose Clamp Assortment, for all cars and trucks—for radiator, heater and defroster connections. 48 of 7 sizes, color coded. List $6.60 per asst.

ORDER FROM YOUR JOBBER

CHAMP-ITEMS, INC., 6191 Maple Ave., St. Louis 14, Mo.

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Are Money Makers For Any Shop because they are priced right and fully guaranteed.

A complete line of chargers. 6 & 12 Volts. Fast & Slow

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Write today for new catalog, prices and details.

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again, gleaming new HIGHS for

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The greatest year in Filko's crown jewel history sees the attainment of new highs for every facet of the crown . . .

- **a new high in users of Filko ignition**
- **a new high in total sales volume**
- **a new high in creative design**
- **a new high in application coverage**
- **a new high in world wide availability**
- **a new high in franchised jobbers**
- **a new high in precision craftsmanship**
- **a new high in institutional prestige**

Each new high gives further evidence of Filko's leadership in the design, production and marketing of improved ignition and the big business aspects of "the Crown Jewels of Ignition."

Filko

more than a replacement part ... a true improvement in ignition

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4248 W. Chicago Ave.
Chicago 51, Ill.

Warehouses in: Los Angeles, Oakland, Miami, Fort Worth, New York, Boston, Atlanta, Cleveland, Lubbock, Little Rock, Philadelphia.

the Crown Jewels of Ignition ®

A group from the Virginias estimated at more than 500 attended this anti-freeze clinic sponsored by Coiner Parts Co. at Staunton, Va., last month. The photo at left shows Manager Charles E. Kennard of Coiner speaking. Picture at right shows these officials of National Carbon Co. in foreground (l. to r.): J. H. Pinkham of Atlanta, Walter E. Reed of Richmond, Va., C. Huntley Christman, Howard Markline and Harold Johnson, all of New York, P. J. Quinn of Richmond, Va., and K. W. Wilkinson, who is stationed at Atlanta.

Insurance and Record-Keeping Set For an Airing at Alabama Meeting

INSURANCE and record-keeping will be prime topics for discussion at the fall convention of the Automotive Wholesalers' Association of Alabama Nov. 25-26 at Hotel Whitley, Montgomery, Executive Secretary John W. Rooney announced.

In addition, addresses will be heard from Nathan M. Roberts, former executive secretary of AWAA and now associate manager of The Alabama Council of Retail Merchants, and Max Fetty, vice-president and sales promotion manager of Delta Tank Corp., Baton Rouge, La.

Roberts was authorized to select his own subject, addressing the association with which he was associated for eight years. Fetty, a humorist and lecturer, will speak after the Sunday night smorgasbord, which will be attended by the members, guests and ladies.

The directors will meet Sunday afternoon.

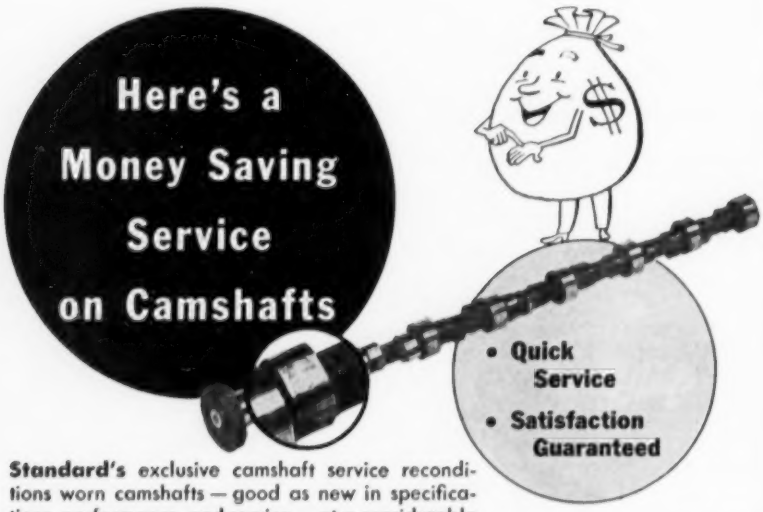
Monday morning Richard T. Cannon, vice-president of Universal Underwriters, will discuss the insurance program which the association is sponsoring for its members.

Roberts' address will be at the Monday luncheon. After lunch, a colored film prepared by Remington-Rand will be shown, dealing with an accounting control system called "SUIAP"—"Simplified Unit Inventory Account Plan." It is being used by three AWAA members and was so highly recommended, the association manager said, "that we are offering it as an education feature to all of our members."

Tom Ryan, sales manager of R-R's visual records department, will discuss the film and handle any discussion which follows. He will be accompanied to Montgomery by A. L. Folk, Birmingham regional manager, and Edward Ramsey of the Birmingham office.

"A whole lot about a few things," rather than a few things about a whole lot, is the tenor of the program, it was pointed out.

D. B. Jones of Opelika is president of the association.



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Standard's "Chromaloy" process and technique have been thoroughly tested and proven on hundreds of thousands of camshafts of all sizes. Some of America's largest truck transportation firms have been using this service without a single failure of any kind.

Let us give you full details and prices, or send us a worn camshaft to recondition.

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SUPER FINISH AND EXTREME ACCURACY

MODEL K403C

Occasionally a manufacturer develops a product that is so outstanding that the trade gives it a rousing welcome. The K. O. Lee Lifetime Refacer is such a product.

The K403C refacer does an exceptionally fine job of grinding valves—providing a super finish seldom equaled by more expensive machines.

K. O. Lee Company, Aberdeen, S. D.

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6 Volt—12 Volt
& Combination Models

Model 7312
12 Volts

ESS BATTERY CHARGERS

Ideal For Boats, Outboard Motors

Sure-fire starts mean sure-fire sales. You get both when you sell ESS Battery Chargers, a "must" for every car owner. Ten models, from battery carts to battery boosters, from 50 to 4 amps., from $100.25 to $9.70, all with automatic reset fuses, are available. Typical of the line is the popular 12 Volt Model 7312. Charging rate starts at 7 amps. on a dead battery, tapers down to 3 amps. as the battery becomes fully charged. Charger delivers up to 55 amp-hrs. overnight. An easy-to-read meter shows the charging rate. Complete with the automatic reset fuse *that cannot harm your battery*, the Model 7312 measures 7¼"x7¼" x6". ESS Battery Chargers are easy to stock, easy to move.

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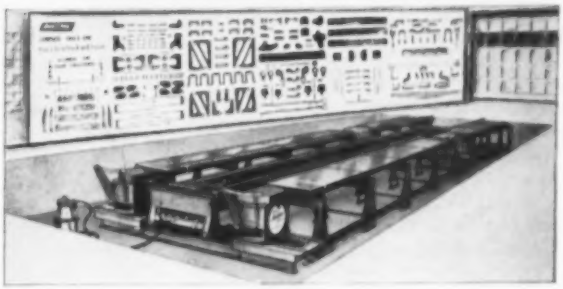
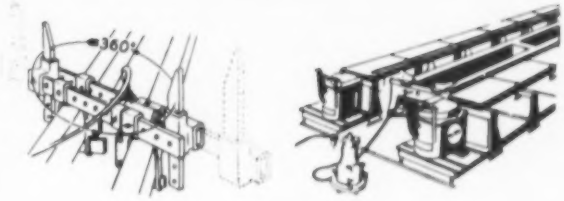
WITH ANY OTHER ALIGNMENT EQUIPMENT





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- * FULL 360° ANGLE TOOLS
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The frame press system has the advantage of greatest strength and complete versatility. Runways and legs are removable for complete access. Sealed, "dust-free" turning aligners insure continued accuracy. Tools rotate in 360° angle, always in line with push or pull. Unit design permits adding units at any time for any size aligner with additional turning aligners. "Push-Button" control means faster, multiple corrections at the touch of a button. Compare with any other to prove the time-saving ability of Bee-Line equipment.

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DAVENPORT, IOWA U.S.A.

Be Thankful If You Can Track Mud Into Your Dwelling, Reports Show

A Reader Survey

THANK your lucky stars if you're not operating in the drought-plagued areas of the Southwest.

While reports from 80% of the jobbers answering a questionnaire mailed to 350 over the South and Southwest last month listed increased sales volume this year over the same period of 1955, most reports from Oklahoma, Texas and Kansas pointed out that the biggest problem was the lack of rain. Seventeen per cent reported a drop, these declines being confined almost entirely to the dry sections. Three per cent listed the same sales as for last year.

Listen to what a Texan said:

"Our sales, dollarwise, are .05% below the same nine months of 1955, but parts volume must be about 6% down due to price increases. There has been no rain here since May. Crops are about 25% of normal and prospects for next year are probably the poorest of the past 20 years."

One Kansan's sales were down 7.65%, attributable directly, he said, to dry weather.

Said an Oklahoman:

"Our five and a half years of dry weather has been, and still is, the A-1 problem in our part of the country. My dollar volume is down 10%."

In the Southeast and in the areas nearer Washington, D. C., the story was different. Sales were up, and up as much as 30%, although many firms called attention to the fact that some of this was due to price increases.

A Tennessean whose sales were up 14% complained:

"Oil distributors and peddlers are selling ———— *(name deleted by editors)* plugs and filters at cost. Some are selling at cost plus 5%. Some are selling anti-freeze at 10¢ a gallon above cost. All oil dealers are cutting prices on ———— *(name deleted)* anti-freeze. This is caused from over distribution. My opinion is that manufacturers are too enthusiastic, or greedy, for volume."

A North Carolinan's sales were up 18%, attributable to "concentration on equipment."

A Texan said his sales were up 6¾%—"so are prices."

Florida replies showed a continuing good business, reflecting the leading-the-nation increases in motor vehicle registrations which have been chalked up in the Sunshine State in the last two years.

One well-known Floridian's figure was up 21% due to "better organization, better inventory and higher prices."

Orangeburg Firm to Expand

Plans for the erection of a new building next year have been announced by Orangeburg Parts, Inc., Orangeburg, S. C.

Perfection in Protection

● Compare any lamp in the entire Griffin line with any other make. You'll find improvements throughout.

The reasons are obvious. Griffin concentrates on fleet requirements—and supplies every fleet need. Griffin makes every lamp heavier, sturdier, more dependable, to stand up under years of gruelling fleet use.

Griffin engineers find more rugged materials—and use them in heavier gauge—to give thousands of extra miles of life. They find new construction processes—and build improved models at competitive prices. And they develop new, exclusive *built-in XX safety factors* to make every Griffin lamp an engineering masterpiece. It will pay you to standardize with Griffin, the complete fleet line. Call your Griffin distributor now.

THE GRIFFIN LAMP COMPANY • HAMILTON, OHIO • SHELBY, MISSISSIPPI

Warehouses—736 East Washington Blvd., Los Angeles, California; 440 Golden Gate Ave., San Francisco, California
37 Leon Street, Boston, Massachusetts; 308 Ninth Avenue, North, Seattle, Washington

THE LINE WITH
BUILT-IN XX SAFETY FACTORS

GRIFFIN
AUTOMOTIVE SAFETY LIGHTING

Tarheels Propose Another Cruise; Okay New-Associations Proposals

THE North Carolina Automotive Wholesalers Association is going to take to the high seas again, in all probability.

And if the 168-member group does, it will be aboard the Swedish-American Line's Stockholm, which pulled into Wilmington, N. C., this month for the maiden voyage of her new bow, replaced after the disastrous crash with the Italian ship Andrea Doria.

Executive Secretary Jesse F. Jones, Jr., announced that the directors, at a meeting in Winston-Salem Oct. 17, tentatively agreed on a seven-day cruise for next November, with probably six hours' stopover at Nassau and a longer stay at Havana. The plan of this special convention, which would be in addition to the regular annual meeting planned around April 1 for Raleigh, is being submitted for approval by a majority of the membership.

The association held a similar cruise-convention to Bermuda aboard the Stockholm last November, with approximately 130 persons attending. As was true then, plans call for inviting all persons interested in the aftermarket industry to attend, Jones said.

The directors also:

Went on record as ratifying the action at the recent meeting in Memphis of the Automotive Wholesaler Trade Association Executives which recommended that there be but one national association of wholesalers and one of manufacturers only.

Recommended an independent poll — by an independent polling organization — be made of all wholesalers as to whether they approved the AWTAE proposals.

Authorized Jones to ascertain if the wholesalers in South Carolina would be interested in affiliating with NCAWA pending the creation of their own long-talked-about state association.

Approved 11 applications for membership.

W. E. Stanford of Motor Bearings & Parts Co., Greensboro, vice-president, presided, although the president, R. E. Kirkland of Wilson, was present. The latter has been "taking it easy" since his recent heart attack.

Air-Conditioner Company To Double Distributors

THE A.R.A. Mfg. Co., Fort Worth, Texas, automotive air-conditioner manufacturer, has announced plans to increase its sales in the northeastern, southeastern and mid-western markets by doubling the number of distributors.

The company this year transferred its company-owned sales pattern to a franchised distributor operation by selling its sales and service branches in many market areas. A.R.A. Sales and Service Co. was then merged with A.R.A. Mfg. Co. to further coordinate manufacturing and distribution under one management.

Newly elected to the board of directors of the unified company are J. A. McFaddin, Houston, president; Nile E. Ball, Dallas, G. W. Derby and A. L. Derby, Fort Worth, vice-presidents; J. H. Mairs, Midlothian, secretary-treasurer; William J. Harris, Dallas, and James O. Toler, San Antonio.

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STOPS!

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PROFITABLE? YOU BET! And it's backed by a guarantee that says Quaker Supreme is supreme in its field!

SIZES: 12 ounce cans • pints • quarts • gallons • 5 gallon drums

Southeast Rep.: L. M. Hirsig Co.
Southwest Rep.: Hirsig-Frazier

Quaker Supreme Chemical Corp.
MONTGOMERY, ALABAMA

Acclaimed DETROIT'S *best . . .*

FAMILY RATES
No Charge for Children 12 and Under

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. . . featuring convenience, comfort, quality! A cosmopolitan atmosphere in home-like setting. In the center of all downtown activities. Newly decorated. Ultra modern, comfortable guest rooms . . . excellent food at moderate prices in our modern coffee shop and cafeteria.

Radio and Television in room.
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800 ROOMS WITH BATH from $3.75

GARAGE and PARKING LOT

FACING GRAND CIRCUS PARK
DETROIT, MICHIGAN
Harry E. Paulsen
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Your Guarantee of the best

"Transmission Engineered" Parts

AUTOMATIC TRANSMISSION PARTS AND REPAIR KITS

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- Ford-o-matic
- Dynaflow
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- Powerflite
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TRAMCO

A KIT FOR EVERY SUB-ASSEMBLY REPAIR

Our products are identified by the BIG T

TRAMCO INDUSTRIES, INC., 43 West 61 St., New York 23, N. Y.

NEW, IMPROVED 3-in-1 WEIGHT PLIERS!

Get this handy combination tool for easier, faster wheel balancing. Really does the job . . . jaw points inserted between clip and rim snap off weights in a jiffy. Especially handy for On-A-Car Balancers—balancer head will not interfere with weight removal. Order from your Jobber or write us for catalog data.

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No More "Problem Wheels" when balancing off the car!

Complete line of NEW RADII CONES!

Precision-machined for true center fit! New set takes care of all car wheels. Specially designed for use with Bear 36 and 330 Balancers! Order from your Jobber or write for data: Bear Mfg. Co., Dept. S-1, Rock Island, Ill.

1339

LOOK TO BEAR for Everything in Safety Service: *Wheel Alinement Machines*, including Telaliner and Drive-Over Tester; *Wheel Balancers*, Dy-Namic and On-A-Car types; *Crankshaft Balancers; Brake and Headlight Testers; Frame, Axle and Wheel Straighteners;* Balantru and other *Tire Truing Machines*. Also, Balance Weights, Caster Shims, Coil Spring Spacers and Stabilizers.

"$3,969 in one month.. SERVICING RADIATORS!

—Neyland's, Baton Rouge, La.

"My new Inland equipment and the wonderful job it does has attracted nearly a $4,000-a-month volume!"

MANY MAKE OVER $8,000 A YEAR! "We are going at the rate of $15,000 a year." Herman's Radiator Service, Twin Falls, Idaho. $13,904 in 9½ mos. made by McCain-Richards, Monroe, La.

20,000,000 Radiators Need Servicing Yearly! And with today's engine power increased, cooling capacity decreased, radiators will require more service than ever before!

Inland, the industry's leader, offers equipment, training, Pays-For-Itself purchase plan—advertises nationally to attract radiator servicing business to Inland-equipped shops. Mail coupon!

INLAND MFG. CO.
1108 Jackson St., Dept. SA-11 Omaha 2, Nebr.
World's Largest Manufacturer of Radiator Servicing Equipment
"SOLD EXCLUSIVELY BY MAIL"

FREE TRAINING SCHOOL
Factory school trains you or your man quickly. Cleaning, repairing, recoring, pricing, everything! FREE to Inland customers.

WRITE
INLAND MFG. CO., Dept. SA-11
1108 Jackson St., Omaha 2, Nebr.
Please send new free book, "Blueprint for Profits."

FIRM _____
(PLEASE PRINT)
ADDRESS _____
CITY _____ ZONE ____ STATE _____
BY _____ TITLE _____
If dealer, make of car sold _____
Are you now operating a radiator shop ☐ Yes ☐ No

Wives of Orlando automotive wholesalers reflect their pleasure as members of the women's entertainment committee of FAWA in the role of hostesses to the feminine contingent attending the second annual convention of Florida Automotive Wholesalers Association (l. to r.): seated, Mrs. A. A. Easterling, Mrs. H. H. Miller, Mrs. Wm. K. McLeod and Mrs. D. W. Roquemore; standing, Mrs. John R. Blackburn, Mrs. E. C. Pinel (chairman), Mrs. J. R. Stradley, Jr., and Mrs. Wm. J. Olivenbaum.

Big Emphasis on Selling Is Planned For Second Annual Florida Meeting

THREE seminars, a manufacturer-jobber table conference, nationally-known guest speakers on timely subjects, record-breaking advance registrations—all point to assured success for the second annual convention of Florida Automotive Wholesalers Association to be held in Orlando Nov. 17-18 at San Juan and Angebilt Hotels, joint convention headquarters.

"Indications are we will have a record turnout of wholesalers and manufacturers," declared Edgar H. Rogers, Jr., president of Consolidated Automotive Co. of Jacksonville, who is FAWA's president. "We have detailed a program that will pack a lot of information into this two-day session.

"While we are not neglecting legislative and inter-industry problems, we are placing special emphasis this year on selling. We have secured the services of Armand J. Gariepy, feature editor of *Jobber Product News*, to sparkplug this portion of our program."

Visitors to the convention will find a truly southern welcome awaiting them. Orlando wholesalers and their wives have been working overtime preparing details. The distaff side of the industry will find Saturday filled to overflowing with special activities arranged by the women's entertainment committee. This embraces a special bus tour, highlighted with luncheon at Eola Plaza and climaxed by a special style show. The ladies also are privileged to attend all the Sunday sessions.

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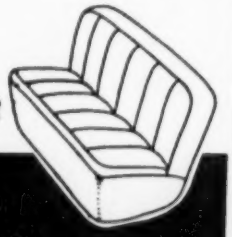

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RADIATOR REPAIRMEN!

For easier, faster, more efficient service use —
LAKE RADIATOR SHOP TOOLS & SUPPLIES
Write for free Supply Catalog

AND for your PROTECTION recommend GUARANTEED —
Genuine LAKE CELLULAR-TUBULAR RADIATOR CORES
Write for free Core Catalog

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Branch—2115 E. 25th St., Los Angeles 58, Calif.

$49.95 Mechanic's price without battery.

There's a Profit Story from Every User of the
HANSON DWELL-TACH TESTER

$195.75 IN TUNE-UPS IN ONE WEEK

Write Today... We'll Quote You the Facts.
HARVEY E. HANSON CO.
171 WEST COMMERCIAL STREET PAW PAW MICHIGAN

The seminars and table conference are being held on Saturday, with the seminars in the morning at Angebilt Hotel and the table conference in the afternoon in the San Juan Hotel.

A member-participation question-and-answer period opens the Sunday morning session.

In addition to Armand Gariepy, the following will appear as guest speakers: Homer E. Krog, Birmingham, Ala., regional director, Wage and Hour and Public Contracts Divisions of the U. S. Department of Labor; M. A. Conner, Tallahassee, traffic and planning engineer, Florida State Road Department; Ira Saks, Cleveland, O., executive director, Anti-Monopoly Committee of Automotive Service Industries; Don Costa, Washington, D. C., Inter-Industry Highway Safety Committee; M. D. "Buck" Taylor, president, International Automotive Exposition; J. Howard Reed, Automotive Electric Association; B. W. Ruark, Motor and Equipment Wholesalers Association; J. L. Wiggins, National Standard Parts Association, and William C. "Bill" Herbert, editor, SOUTHERN AUTOMOTIVE JOURNAL.

FAWA's annual banquet and frolic will be staged Saturday evening, following the Booster hospitality hour. An "industry" luncheon will be served Sunday.

Not to be outdone by the distaff side of the family, members of the Orlando Automotive Jobbers Association have determined to roll the welcome mat out in regal style for the jobbers and manufacturers heading into Orlando for the state convention Nov. 17-18. It is obvious these gentlemen, comprising FAWA's entertainment committee, have accepted their assignments as cheerfully as the gals. They are (l. to r.): seated, D. W. Roquemore, Roquemore Motor Supply; H. H. Miller, Miller Machine Co.; W. P. Blackburn, Allied Parts Co., Inc.; Ed. Williams, Central Auto Supply; Wm. J. Olivenbaum, Al Huppel, Inc., president; standing, R. H. Roney, Miller Machine Co.; J. R. Stradley, Jr., Stradley Motor Supply, Inc.; E. C. Pinel, Dixie Motor Supply Co.; A. A. Easterling, Bailey Motor Equipment Co., and Jas. L. Magee, Central Auto Parts.

EARN BIG PAY

Earn While You Learn

DIESEL MECHANICS, AUTO MECHANICS WELDING, BODY AND FENDER REPAIR

Train in our modern shops.
You learn with tools on real equipment.
Master a trade with a real future.
Many of our graduates earn $100 per week and up.

THOUSANDS OF MECHANICS NEEDED!

***50,000 NEEDED**

The nation's requirements for new mechanics now is nearly 50,000 a year, as motor vehicle registrations begin mounting beyond 60,000,000. It has been estimated that mechanics graduating from schools number only around 10,000 a year.

***Southern Automotive Journal for January, 1956**

- DAY AND NIGHT CLASSES APPROVED FOR VETERANS
- WRITE FOR FREE BULLETIN DEPARTMENT NO.7

NASHVILLE AUTO-DIESEL COLLEGE
226 7th Avenue, North, Nashville 3, Tennessee

FRONTIER® STEEL WORK BENCHES

Best Built—Best Buy

The bench you can depend on. Of complete steel construction — heavy duty top — 12 gauge. Legs set solid on the floor without bolts.

More for your MONEY. Improve your work area. Back and End Stops and Drawers available.

Sizes: 5', 6' or 10' long
34" high
28" deep

Wood tops are also available.

Baked on Green or Gray enamel finish.

WRITE FOR DESCRIPTIVE LITERATURE.

FRONTIER MANUFACTURING COMPANY
P. O. Box 12266 Dallas, Texas

Automotive NEWS BRIEFS

(Continued from page 21)

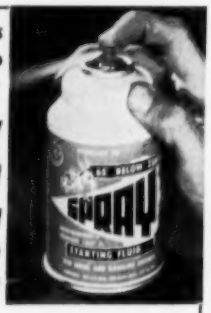
Special Products Names Nine for the South

APPOINTMENT of nine district sales managers in the South, to head the dealer recruitment program for Ford Motor Co.'s Special Products Division, has been announced by J. C. "Larry" Doyle, general sales and marketing manager of the Special Products Division.

They were:

New Orleans—Claiborne H. Weigand, native of the city, who came to Special Products Division from Ford Division, where he had been Omaha district sales manager. Weigand was Lincoln-Mercury Division manager in New Orleans from 1939 to 1942. After seven years in the Navy he returned to Ford in 1949, transferring to Ford Division as district sales manager in New Orleans. He was moved to Houston as district sales manager in 1950 and to Omaha in 1954.

Quick starts down to 65° BELOW ZERO for Diesel and gasoline engines



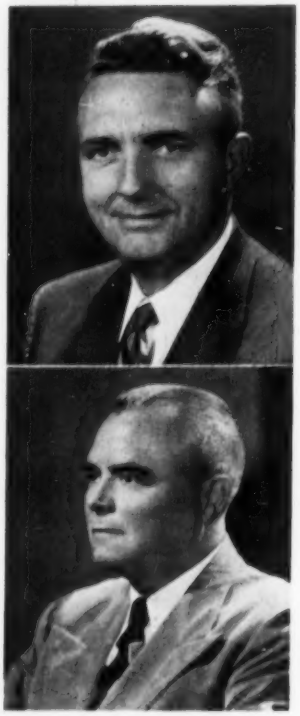
SPRAY STARTING FLUID, with the propellent used in the pressurized can, insures quick starts for Diesel and gasoline engines in temperatures as low as 65° F. below zero and withstands 180° F. heat. This combustible propellent was developed after two years of research.

SPRAY STARTING FLUID pressurized with our inert propellent is absolutely safe and odorless in storage.

SPRAY STARTING FLUID is sold through distributors, wholesalers and their dealers located throughout the United States and Canada.

SPRAY PRODUCTS CORPORATION

P. O. BOX 584 • CAMDEN 1, NEW JERSEY



Top: Roy A. Blount
Bottom: Emerson Planck

Houston—George O. Simmons, a 20-year Ford career man. He started with Ford in Houston in 1936 and, following World War II, rejoined the company in 1948 as assistant district sales manager in Kansas City. Simmons was transferred to a similar assistant district managership in Detroit in 1951, and in 1952 was made district sales manager in Pittsburgh. He was promoted to executive assistant to the regional sales manager in Kansas City in 1954, holding that position until joining Special Products Division.

Dallas—Robert J. Sanford, zone manager for American Motors for two years prior to joining the division. Sanford accepted a position with Nash in Dallas in 1944 as business management manager. After five years at Cincinnati he was moved to Dallas in 1954 as American Motors zone manager.

Memphis—William W. Sugg, who left Ford in 1942 for the Army after five years as assistant district sales manager in Charlotte, N. C. After his Army service he went with a Charlotte dealership as wholesale manager and next took a position as Chrysler Sales Corp. regional manager in Detroit in 1947.

Atlanta—Roy A. Blount, who started in the automobile business in 1946 as assistant zone manager of Studebaker in Atlanta. He was made Atlanta zone manager six years later and in 1954 was promoted to regional manager of Studebaker-Packard in Dallas. Blount returned to Atlanta in late 1955 for Studebaker-Packard, on special assignment.

Jacksonville—J. D. Flynn, whose automotive experience started in 1939 when he joined Lincoln-Mercury Division in New Orleans in parts and service operations. Following World War II he was made a sales representative and was promoted to New Orleans truck and fleet sales manager in 1948. In 1950 he joined the Ford Division Kansas City district office as sales representative. Flynn was made assistant district sales manager in 1952, regional dealer placement manager in 1954 and a year later was again assistant district sales manager.

Kansas City—Ellwood S. Gross, Studebaker-Packard zone manager in that city for the past two years. He was Packard city manager in Philadelphia from 1949 to 1951, assistant zone manager in Chicago from 1951 to 1954 and national business management manager in Detroit for Packard for nine months before being promoted to Kansas City zone manager.

St. Louis—A. E. Jacobsen, 23-year Ford veteran who started in the Chicago assembly plant. He was transferred to sales in the Chicago Ford Division district. Jacobsen was made regional business management manager in 1949, assistant Chicago district sales manager in 1952 and moved to a similar position when Ford Division opened its Davenport, Iowa, sales district in 1955.

Washington—Emerson Planck, a 34-year Ford veteran whose automotive career started in 1922 when he became a zone manager in Chicago. He was made Lincoln Division manager in Omaha in 1923, and was assistant manager of the New York Lincoln district

Secretary of Commerce Sinclair Weeks last month presented the Horatio Alger Award to R. E. Dumas Milner of Jackson, Miss., a former cotton picker and a service station operator at Kosciusko less than a generation ago who's now rated a millionaire, what with half a dozen GM dealerships over the South and the purchase last month of Bill Sullivan Chevrolet Co. of Kansas City for a price reported at $400,000. Shown here are (l. to r.): Weeks, K. E. Staley, assistant general sales manager of Chevrolet Motor Division; Milner, and Governor James P. Coleman of Mississippi, who went to Washington for the occasion. The award is given annually by the American Association of Colleges and Universities. Other recipients have included Former President Herbert Hoover, Dr. Milton Eisenhower and Bernard Baruch.

from 1928 to 1930. Planck was made successively assistant district sales manager in Cleveland in 1939 and then in Washington in 1941. He served as Ford Division district sales manager in Norfolk, Va., from 1944 to 1951, in Richmond, Va., from 1951 to 1953, and in Washington from 1953 to 1956.

Special Products will bring out the so-called "E" car—to sell between Ford and Mercury—soon.

State Senator Carroll G. Oakes (right), Morristown dealer who steered legislation creating the factory-dealer licensing board in Tennessee, is shown here last month as he assumed the presidency of the Tennessee Automotive Association at the Gatlinburg convention, succeeding the retiring president, R. L. Parnell (left), who is a dealer at Nashville.

Tool hunting eliminated—

TULDEX

pays for itself in time savings alone!

...says Whitey Jones, shop foreman of Holt Motor Co. of Los Angeles, world's largest Dodge-Plymouth dealer.

"TULDEX pegboard storage pays for itself by saving several minutes every-time you reach for a new tool. And it keeps tool loss way down because you get a mental picture of each tool's location—if you pull out a panel and it looks bare in one spot you can retrace your steps to find where you last used or loaned the missing tool."

Whitey, who has been an automobile mechanic for more than 30 years, goes on to say, "Tuldex will make any mechanic a better worker because it organizes his tools so that he can concentrate on his job and not worry about finding a needed tool."

Huot Tuldex design features six tool-holding 12" x 20" pegboard panels that roll out on nylon bearings for easy access. The panels accommodate movable tool hangers in any arrangement for all kinds of tools. Panels and doors together give more than 24 square feet of tool storage area—twice as much as most tool chests.

The heavy steel Tuldex cabinet with top and bottom locks is finished in blue and grey baked enamel. The big drawer is ideal for power tools or bulky items. Tuldex can be set on a bench, hung on the wall or mounted on a movable Huot Porta-Cab. Overall size is 29" x 26" x 13¾".

Warehouse Stocks Carried in Dallas.

HUOT

HUOT MANUFACTURING CO.
587 No. Wheeler Street • St. Paul 4, Minn.
Huot's pronounced "Hew-ot"

Nichols, of Strong Southern Ties, Heads Up New Chrysler Sales Plan

BYRON J. Nichols, the new general manager-group marketing for Chrysler Corp. automotive products, has a lot of strong ties with Texas and the South.

He grew up in the environment of his father's automobile dealership and after-school hours learned the business, selling his first new car when he was 15 and building his own race car when he was 16 years old.

He joined Dodge in March, 1955, as general sales manager and was named a vice-president of Dodge in August, 1955.

He began his business career in 1933 when he went to work in the Ford assembly plant in Kansas City. In 1939, he became field manager for Ford at Topeka, Kan. In 1940, Nichols joined DeSoto as regional merchandising manager with nine states to cover out of the Kansas City region. In 1942, as a first lieutenant he personally recruited a company of 280 technicians that formed the 503d Heavy Maintenance Tank Company. He won a field promotion to major early in the Normandy invasion and later served on the staffs of Lt. Gen. Omar Bradley and Gen. Douglas MacArthur.

He returned to civilian life in 1945, and rejoined DeSoto as assistant advertising manager in Detroit. In February, 1946, he was made regional manager for DeSoto in Atlanta, Ga. In 1951, he rejoined Ford as operations manager in charge of dealer development and a year later he was promoted to investment manager of the dealer development program, the position he held prior to returning to Chrysler Corp.

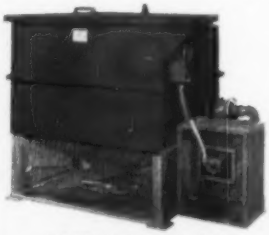
Born July 15, 1913, in Beloit, Wis., he attended schools in Belvidere and Elgin, Ill.; Kansas City, Mo.; Dallas, Houston and Beaumont, Texas. He graduated from Beaumont High School and attended Lamar Technical Institute in Beaumont.

Formation of a streamlined marketing organization to serve all of Chrysler Corp.'s car and truck

Top: Byron J. Nichols
Above: Arthur B. Nielsen

MODEL D1 DYNOMASTER
ENGINE RUN-IN AND TEST STAND

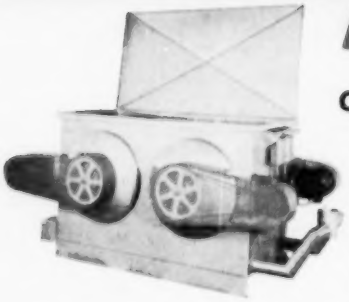
The perfect machine for pre-testing rebuilt engines. Tests entire lubrication system, valves, tappets, push rods, and all metal surface clearance. Flushes inner engine with oil under pressure. Eliminates costly reworking after installation. Improves workmanship, and assures satisfactory engine performance. FULL INFORMATION AVAILABLE.



MODEL JR-60
TURBO-BLAST
Cleaning Machine
8 other models for all parts cleaning jobs.

STORM-VULCAN INC.
2225 BURBANK STREET DALLAS, TEXAS

TURBO BLAST
CLEANING MACHINES
...Super Mechanical Agitation



NEW! MODEL 236-SM
TURBO-BLAST
CLEANING MACHINE

Fastest cleaning machine made! Side-mounted impellers increase solution life four times. Cuts cleaning time in half. No dirt or sand in oil lines and cavities. Call or write for full details about this revolutionary cleaning machine.

• Thousands of users have found TURBO-BLAST machines the RIGHT answer to their cleaning problem—from small parts and fittings to Diesel, Industrial and Aircraft engines.

divisions in the field was announced Oct. 24 by William C. Newberg, vice-president—automotive group.

The new coordinating organization, which went into action Nov. 1 simultaneously with public introduction of the company's 1957 "Flight Sweep" passenger cars and Dodge trucks, will be responsible for marketing all of the corporation's automotive products, putting principal emphasis on volume sales of Chrysler Corp.'s low-price car, Plymouth.

Newberg announced the appointment of Nichols, 43, as general manager-group marketing, to head the new sales structure, and Arthur B. Nielsen, 56, as director of field operations under Nichols. Nielsen was general sales manager for DeSoto.

In the field, the work of the new organization will be the responsibility of four area directors of field operations as follows:

Eastern — Charles P. Noonan, formerly in Detroit as sales manager of the Chrysler line, will be director of this area, with headquarters in New York City.

Central — E. M. Braden, formerly general sales manager for the Chrysler line, will be director, with offices in Detroit. His territory includes the Detroit, Pittsburgh, Cincinnati, Atlanta and Charlotte regional offices.

Midwestern — A. L. Shuster, formerly in Philadelphia as eastern zone sales manager for DeSoto, will direct this area from Chicago. His area includes Chicago, Minneapolis, Memphis, St. Louis and Kansas City regional offices.

Western — E. P. Letscher, formerly sales manager for Dodge and earlier Dodge regional manager at Greensboro, N. C., will direct this area from Los Angeles. His area includes Los Angeles, San Francisco, Portland and Dallas regional offices.

Assisting these four area directors will be 18 zone managers.

'57 Mercury Represents Huge Cash Outlay

MERCURY'S brand-new "Big M" for 1957 will set an entirely new trend in automotive styling and performance, backed by a total investment of more than half a billion dollars in manufacturing and engineering facilities and working capital, Ford Motor Co. officials asserted at Miami last month.

"This investment in Mercury is equal to an expenditure of about $160,000 per Mercury dealer," Ernest R. Breech, chairman of the board of Ford, told 2,500 Mercury dealers, their wives and partners assembled at Miami, Fla.

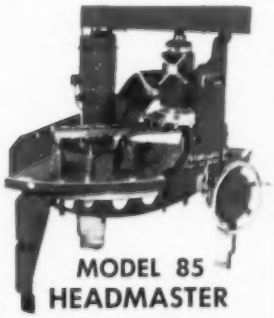
"The medium-price market is a relatively new and growing market that offers outstanding possibilities for growth with total sales in this price class in 1956 exceeding two million units," Breech said. "We are aiming for an increase in Mercury's market penetration next year of one and one-half percentage points over the current year—or for 6½% of the market.

"That means we are counting on an increase of at least 100,000 in next year's sales and we have the product in this new Mercury to do it."

F. C. Reith, general manager of the Mercury Division and a Ford Motor Co. vice-president, told the dealers and 150 news writers from all parts of the country that Mercury will:

Increase its 1957 sales 45%, based on a 6,750,000 unit sales year for the industry.

Depart from its traditional body shell in 1957 and introduce a larger "B" body on its models which will be used exclusively by Mercury.



MODEL 85 HEADMASTER

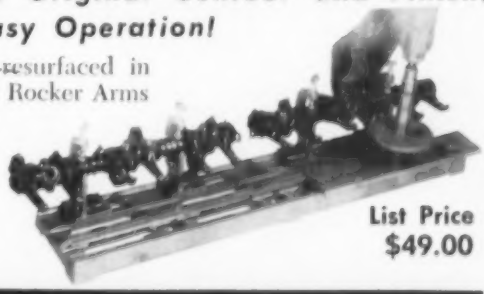
For fast, accurate cylinder head milling.

NEW!

MODEL 911 ROCKER ARM REFACER

Restores Original Contour and Finish! Fast, Easy Operation!

Average set of Rocker Arms resurfaced in five minutes or less. Resurfaces Rocker Arms in operating position. Grinding wheel driven with any valve seat grinder or electric drill. Handles all automotive Rocker Arms. Write for full description today.



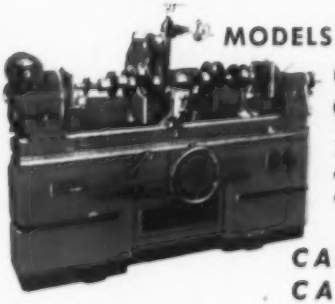
List Price $49.00

STORM-VULCAN INC.

2225 BURBANK STREET DALLAS, TEXAS

MODELS 75 AND 75-A CAMSHAFT GRINDERS

For Automotive and Industrial Camshafts.



MODELS 15 AND 15A CRANKSHAFT GRINDERS

Highest in precision, lowest in cost.

The Nation's Leading Machine Shops STORMIZE *with Storm-Vulcan Machines*

CALL OR WRITE FOR COMPLETE CATALOGS OF ALL MACHINES

Free Piston-Turbine Engine Plods Nearer Car Use, Scientist Asserts

THE growing importance of the free piston-turbine engine as the possible automotive power plant of the future was stressed last month by a Ford Motor Co scientist.

Dr. Donald N. Frey, associate director of Ford's Scientific Laboratory, told members of the Society of Automotive Engineers at Detroit that the free piston-turbine engine already compares favorably with today's engines in throttle response, fuel economy and cost of manufacture.

For the first time in the industry, Frey revealed complete design statistics of an automotive-size piston gasifier and matched turbine, together with detailed analytical results of tests made at Ford's laboratory

Frey cautioned against "extravagant claims" because the free piston-turbine engine has important obstacles to clear before it becomes practical.

However, he told the symposium that "the free piston-turbine engine could be adapted to split installations in passenger cars — gasifier in front and power turbine in rear."

"This would eliminate the drive-line tunnel so prominent in today's low cars and provide for good weight distribution," he said.

In Frey's opinion, however, the most serious disadvantage of the new engine is that its weight is in excess of three pounds per horsepower at the present time — considerably more than the comparable weight-horsepower ratio of a conventional engine.

Furthermore, the full load life of the free piston gasifier at design weights of three pounds per horsepower remains uncertain, he explained.

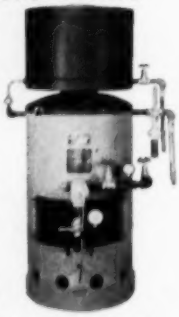
Frey reported that those gas turbine systems which do not employ the free piston gasifier have greater disadvantages to overcome to be successful.

"They have no weight advantage over those modern-day engines with 9.5 to 1 compression ratio," he said. "They have a much poorer acceleration and a borderline fuel consumption."

"The free piston gasifier appears to be a possible alternative to the compressor and compressor turbine of the gas turbine engine," he concluded.

Frey said that "any new kind of automotive engine to supplant, in significant measure, the present piston engine must weigh less, occupy less space, cost less, be more economical to operate and give better vehicle performance."

EWING FULLY AUTOMATIC
STEAM CLEANERS
Ewing the "original" low-price Steam Cleaner!
NO MOVING PARTS

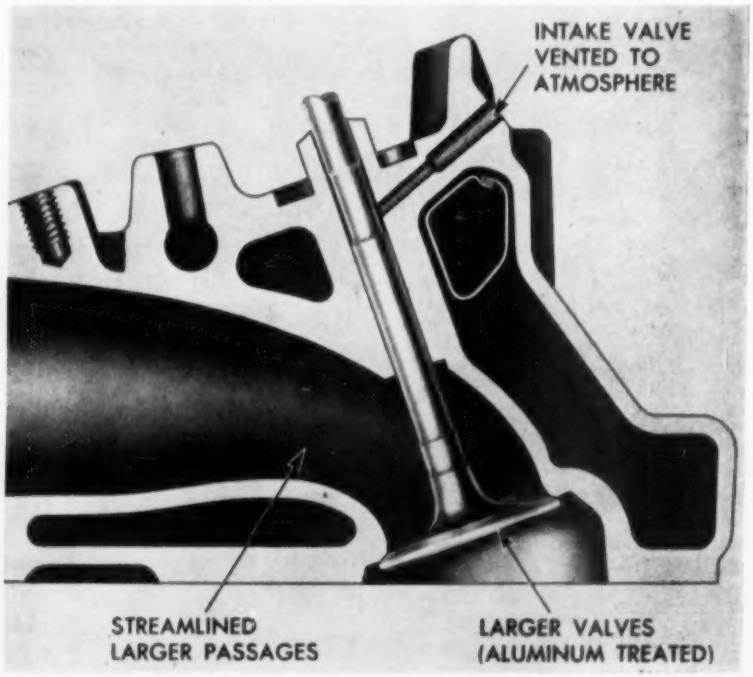


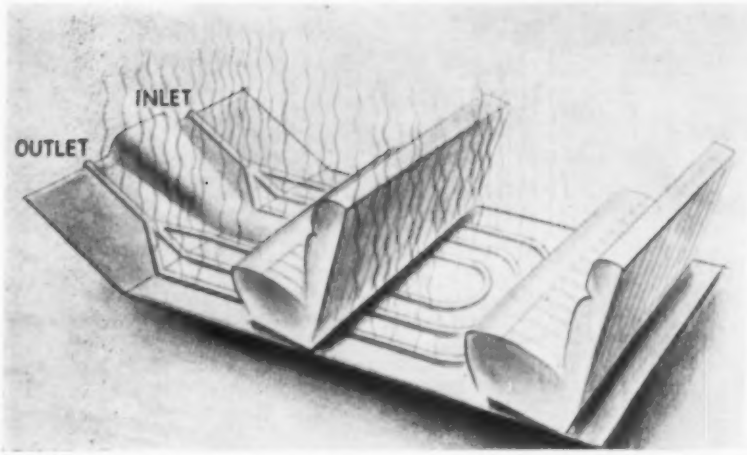
Quick, dependable supply of steam or warm water in 2 minutes. For cleaning jobs or wash rack. Solution does not pass through coils. Economical to operate.
Improved Model C shown has 80-gallon per hour capacity. Operates on any type gas. Fully automatic. NO MOVING PARTS. $434.50. Other Models up to $1464.75. 10% down, up to 36 months on balance.
America's most complete line of oil and gas operated steam cleaners for 30 years.
EWING MANUFACTURING CO.
Box 875 Oklahoma City, Okla.

ATLAS
QUALITY WHEEL WEIGHTS
"THE WEIGHT OF THE WORLD"
Made by South's First Weight Manufacturer.
- Precise Fit on Tubeless Tires
- Double Curvature Spring Clips
- Thin and Regular
- Fractional 1/4 oz. Sizes
- Fits New 14" Wheels Also.
- Best Truck Weights Made
- Stocked by Best Jobbers
- Large Factory Inventories For Immediate Shipment.

ASK YOUR JOBBER FOR ATLAS WEIGHTS
Atlas WEIGHT CO.
1140 ZONOLITE ROAD, N. E.
ATLANTA 6, GEORGIA

Intake valve stems on Pontiac's 1957 V-8 are vented to the atmosphere to eliminate the danger of engine lubricating oil being drawn into the combustion chamber. This Pontiac "first" provides a drilled passage in the cylinder head which mates with a groove in the valve stem. It prevents the vacuum within intake passage from drawing oil between the valve stem and the stem guide. For other Pontiac features, see page 53.





A revolutionary stainless steel radiant heating system for automobiles was proposed at Detroit last month at the annual meeting of the American Society of Body Engineers. Jon Hauser, industrial designer, outlined the system, based on using a stainless steel floor pan in which tubes would carry hot water from the engine to every part of the car. This would provide maximum heat on the floor of the car where it is needed most. The heat would then radiate evenly throughout the entire passenger compartment. Present systems which blow heated air from under the dashboard or seat do not permit the uniform distribution of heat. By using heated water from the engine, the new method would also make present blowers and duct work obsolete.

Georgia Tech Receives GM Engine Gift

GEORGIA Tech students learning about automotive engines and equipment will be aided in the future with their studies at the Atlanta, Ga., school through observation of a $100,000 display of working engines and transmissions presented to the School of Mechanical Engineering last month by Chevrolet Motor Division.

The display features full-size cut-away engines and transmissions. The units, electrically operated to show their inner workings in action, are part of a regional show which has been viewed by thousands of spectators.

Requiring months of painstaking work to design and construct, the display reveals the operation of Chevrolet V-8 and engines.

Four of a group of Arkansas dealers who received safety awards from Universal C.I.T. at the recent Arkansas Automobile Dealers Association convention were (l. to r.): Bruce Replogle, C. I. T. division vice-president who was on hand for the occasion; Verl Hudspeth of Harrison, Searcy Wilcoxon of Hamburg and Crossett (two agencies and two awards), Winfred Polk of Corning and Bob Reed of Texarkana. Awards were presented in recognition of dealers who furnish driver-training cars for use by schools. Don Costa of Mobile, Ala., southern representative of the Inter-Industry Highway Safety Committee, attended the presentation. Each dealer received a plaque and a picture was made of the presentation and a special picture of the plaque. These two pictures will be framed and given to the school participating in driver education.

Stock 'n sell DL for quick, easy PROFITS!

NATIONAL ADVERTISING CREATES A BIG DEMAND!

UNIVERSAL ACCEPTANCE INSURES RAPID TURNOVER!

CUT CLEANING COSTS WITH THIS DISPENSER

CONTAINER SIZES
For Dispensers, 4½ and 5 lb. For general use, 14 oz., 3 lb. and 5 gal.

It delivers just the right quantity with one pull of the lever. To refill insert 5-pound can of DL HANDI-Cleaner and throw away when empty.

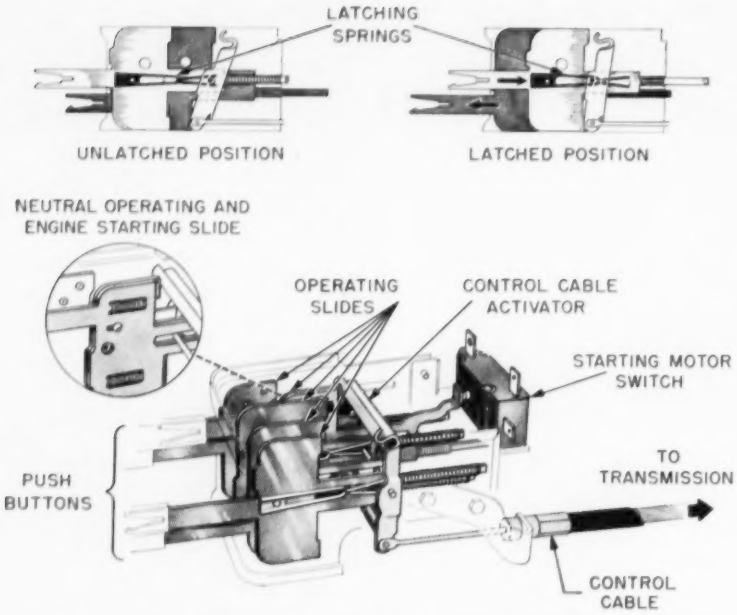
The ORIGINAL Cream Type HAND CLEANER
with Hexachlorophene and Lanolin

A guaranteed and insured product that removes stubborn grime and grease gently, and thoroughly. Guards against skin infection and Dermatitis. No abrasives or solvents to irritate the skin.

First and Finest for Over Twenty Years!

DL HANDI-CLEANER . . . USE WITH OR WITHOUT WATER

Made only by
BANITE CO. BANITE BUILDING BUFFALO 4, N. Y.



This shows the pushbutton controls on Chrysler Corp.'s Torque-Flite transmission (with neutral starting motor switch).

Servicing Radiators Can Pay Well, Garageman of Baton Rouge Learns

There's money in servicing radiators.

Ask Bob Neyland of Baton Rouge, La., owner of Neyland's Auto Paint and Body Works.

He had been doing fairly well repainting cars and rebuilding auto bodies. But, so many customers had asked where they could have their radiator cleaned or repaired that he felt he should make an investigation. He learned, somewhat to his surprise, that radiator servicing could offer an unusual opportunity for profits.

So, he decided to set up a special radiator servicing department and began looking for suitable equipment. Through the recommendations of others in the industry and, because he wished to avail himself of a complete factory training course in radiator servicing, he made his selection. And it proved to be a wise one.

He recently stated that after installing his equipment and taking the factory course in Omaha, Neb., he opened his new department on Sept. 15, 1955, and was soon making real profits. He added: "Once my customers saw the fine job this equipment did, they told others, and my radiator business increased rapidly."

His first month's gross business was $894.74. Two months later, from Nov. 1 to Nov. 30, his gross from radiator servicing alone was $3,969.40. Nearly $4,000 in a single month!

Bob Neyland isn't the only one making big money servicing radiators. Many hundreds of similar departments throughout the South are making $8,000, $10,000 and more a year.

Special radiator servicing shops are opening up in hundreds of cities and towns. This movement was predicted by experts some time ago when it was noted that automobile builders were using smaller radiators and higher compression engines.

This means that today's radiator has a tougher job than yesterday's. It must dissipate more heat. Yet, the smaller size can makes this difficult, because it becomes clogged with motor rust and lime more quickly, reducing its cooling efficiency and increasing the likelihood of overheating.

Tests have shown that many radiators—automobile, truck and tractor—which have been in service for a year or more are at least 25% plugged. When the radiator must function at only 75% efficiency, it is ripe for overheating, and overheating is one of the principal causes of road failure.

A 7-by-10-foot space is sufficient for a radiator department. Many start with only the three main pieces of equipment, adding other units later. Required equipment includes a test machine which permits quick check of radiators, on or off the car, for possible plugging. A gauge shows just how much the radiator is plugged.

A hot cleaning vat is essential for thoroughly cleaning the radiator. A hot chemical compound boils out internal deposits. For repairing, such as tinning, patching, recoring, etc., some shops use a test-and-repair bench with its power-driven elevator for submerging the radiator for testing. The elevator also regulates the platform height for most convenient working position.

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2616 Ross Avenue Dallas 1, Texas

American Motors Ups Boyd To Field Sales Manager

V. E. Boyd, 44, has been promoted to the newly-created position of field sales manager for American Motors Corp., it has been announced by Roy Abernethy, vice-president of automotive distribution and marketing. Boyd will be responsible for Rambler, Nash and Hudson sales.

He has been in the automobile business for 25 years as a dealer, field official and factory executive.

Anodized Aluminum Use Likely to Increase

A GENERAL Motors research executive predicted last month that the automotive industry will respond to the continuing nickel shortage with greater use of anodized aluminum for decorative parts.

C. F. Nixon, head of the Electrochemistry Department of the GM Research Staff, told the American Electroplaters Society at Philadelphia that anodized aluminum probably will replace many chromium-plated parts now in use.

"The continuing shortage and increasing price of nickel have increased willingness to consider finishes that are not nickel dependent," Nixon said. He explained that anodized aluminum — a coating of aluminum oxide on aluminum — has this merit.

Recently, Nixon said, some designers have begun to increase the use of gold plating. However, he pointed out, gold plating is expensive and its durability depends on permanence of a clear organic coating which normally doesn't last very long.

"Gold-colored anodized aluminum where it can be used seems a good answer to this dilemma," he said.

Nixon explained that some decorative parts, such as the present Cadillac grille, would be difficult to achieve with any other material. These parts have done well in service, inasmuch as aluminum doesn't rust and eruption blisters do not form on it.

Nixon said use of anodized aluminum will depend on customer preference. It has a bright satin finish as contrasted with the full luster chrome finish.

Although anodized aluminum has been used on passenger cars only recently, its use on other products dates back 25 years. Ice trays in a variety of colors have been offered by GM's Frigidaire and Inland Mfg. divisions.

Also, GMC Truck & Coach Division has used it on the exteriors of its coaches for the past 15 years.

"GMC Truck & Coach people have informed us that over the entire period they have been using anodized aluminum, service results have been satisfactory. There have been no customer complaints," Nixon said.

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STATEMENT OF OWNERSHIP

Statement required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) showing the ownership, management and circulation of Southern Automotive Journal, published monthly at Dalton, Ga., for October 5, 1956.

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A. F. ROBERTS,
Business Manager

Sworn to and subscribed before me this 5th day of October, 1956.
(SEAL)

SEBA J. JONES,
Notary Public, Georgia State at Large
(My commission expires 1958)

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This listing of Advertisers and Manufacturers' Agents is published as a convenience, and not as a part of the advertising contract. Every care will be taken to index correctly. However, no allowance can be made for errors, or for failure to insert. We will appreciate your calling to our attention any corrections or omissions promptly. Only manufacturers' agents are listed on opposite page.

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Why HIRSIG Service Means Complete Service in the South

for Manufacturers and Jobbers!

Lawrence M. Hirsig

Mrs. Lawrence M. Hirsig

B. T. Brantley

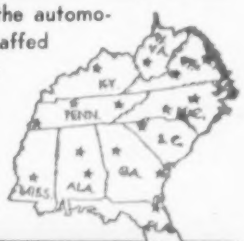
B. W. (Larry) Hirsig

IT'S EASY to understand why Hirsig Service means complete service for manufacturers and jobbers in the South. A quick look at the Hirsig organization is all that is necessary. . . .

AUTOMOTIVE EXPERIENCE . . . Hirsig Service is complete because of the many years of automobile experience behind this organization . . . an average of over 13 years per man! These years of experience bring know-how to the creation and maintenance of the kind of service that builds business.

SMALL TERRITORIES . . . Hirsig men have small territories so they can make more frequent calls on their customers and serve them better. From headquarters in 17 Southern cities, information brought to customers on Hirsig lines is timely and complete.

CAREFUL PLANNING . . . The work of the Hirsig men in the field is planned and directed from Headquarters by men with long and successful experience in the automotive field. A fully staffed home office promptly handles the necessary details as required by an efficient sales organization.



LAWRENCE M. HIRSIG & CO., AMERICAN NATIONAL BANK BLDG., JACKSONVILLE 7, FLORIDA
MANUFACTURERS DIRECT REPRESENTATIVES

Beveled Chrome-Vent Rings in Hastings 2C Chrome Sets are covered by U. S. Patent Nos. 2148997, 2511874, 2565042, 2712971

See why Chrome-Vent seats faster, controls oil better

With any good magnifying glass, you can see for yourself why Hastings 2C Chrome Sets seat faster, control oil better and last longer.

Look at a rail of the Chrome-Vent oil ring—where oil control really begins. See the patented shape—*beveled* to wear-in 3 to 4 times faster than conventional chrome. Note the exclusive fineline contact area that gives precision oil control right now—and for the life of the ring. See, too, how the thick chrome cap extends *around* the segment to give at least 3 times greater chrome wearing surface.

And, although you can't see it here, this beveled design permits use of a lighter inner-spring. So you get a gentle, soft-pressure contact with any cylinder wall—tapered, out-of-round or rebored.

Next ring job, install a 2C Chrome Set with beveled Chrome-Vent oil rings to seat super-fast and give immediate, long-lasting oil control. Another example of Motor Engineering *by replacement specialists.*

HASTINGS MANUFACTURING COMPANY, HASTINGS, MICHIGAN
HASTINGS LTD., TORONTO

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CONVENTIONAL CHROME RAIL

originated by Hastings . . . now replaced by Hastings exclusive Beveled Chrome

Beveled Chrome-Vent

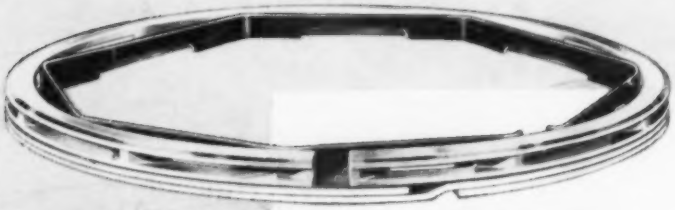
BEVELED CHROME RAIL

makes fineline contact with cylinder wall for a faster seat. Less area to wear-in means less time to break-in.

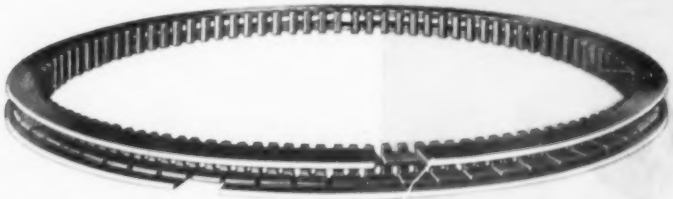
Tough on oil-pumping
Gentle on cylinder walls

HASTINGS

Beveled Chrome-Vent Piston Rings



Both Have It!



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FINEST **Immediate Oil Control** without wall wearing pressure

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